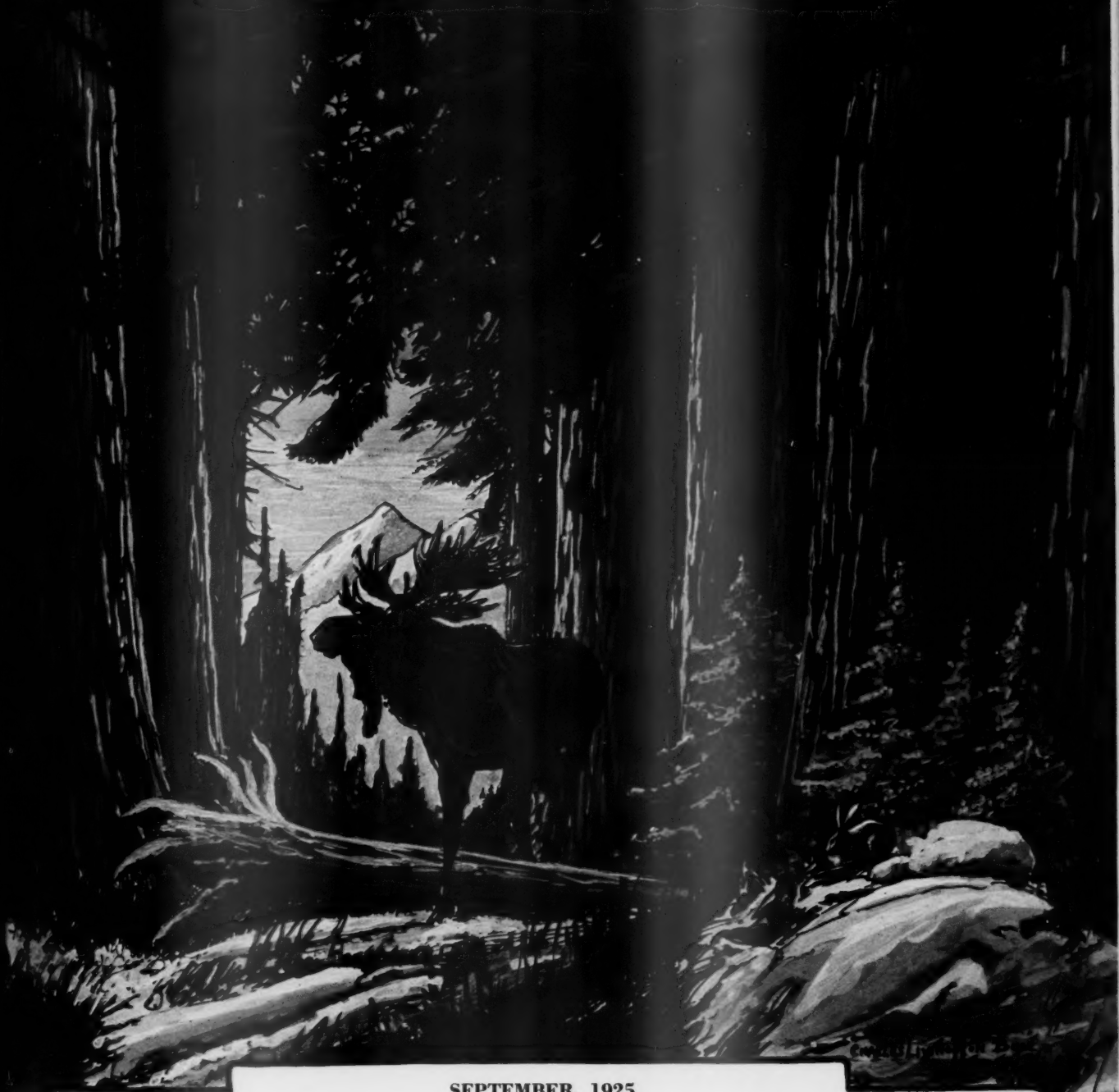


AMERICAN FORESTS *and* FOREST LIFE



SEPTEMBER, 1925

THE FIGHT FOR THE FOREST RANGES

THE LAND RIDDLE : NORTH of the ARCTIC CIRCLE

VOL. 31, No. 381

PRICE 35 CENTS

The American Forestry Association

Washington, D. C.

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AMERICAN FORESTS AND FOREST LIFE

(Formerly American Forestry)

THE MAGAZINE OF THE AMERICAN FORESTRY ASSOCIATION

OVID M. BUTLER, Editor

WASHINGTON, D. C.

L. M. CROMELIN, Assistant Editor

Vol. 31

SEPTEMBER, 1925

No. 381

CONTENTS

The Land Riddle of the Lake States—John A. Doelle.....	515
With seven illustrations	
Shall the Stockmen Control the National Forests?—Ovid M. Butler.....	519
With three illustrations	
The Calvin Coolidge State Forest—Perry H. Merrill.....	523
With one illustration	
American Forest Week Conference.....	523
The One Who Talked and The One Who Worked—P. M. Barr.....	524
Announcement of Prize Winners in Picture Title Contest.....	525
Mount Rainier's Magic Carpet—P. M. Fogg.....	526
With four illustrations	
From the Place of the Bad Woods—P. L. Sperr.....	529
With five illustrations	
Meeting of Society for Protection of New Hampshire Forests.....	532
North of the Arctic Circle—Alfred M. Bailey.....	533
With eight illustrations	
Whoo's Whoo?—A Poem—T. Clinton Brockway.....	537
With one illustration by Farr Brockway	
Uncle Sam's Highest Lookout Tower—Edward P. Ancona.....	538
With three illustrations	
"Spud"—The Hold-up Bear—Albert C. Allen.....	540
With two illustrations	
Magnolia Gardens—Henry F. Church.....	543
With seven illustrations	
Editorials.....	548
The Spirit of Life—Arthur Hawthorne Carhart.....	550
With seven illustrations	
Public Opinion Rallies to Support of Fire Prevention Campaign.....	555
Famous Old Logging Camp Ballads—Jim Whalen—Franz Rickaby.....	556
With one illustration	
Old Moccasin Boggs—a Poem—Charles V. Brereton.....	561
Around the States.....	562

Published monthly—35 cents a copy—\$4.00 a year

CHANGE OF ADDRESS

A request for change of address must reach us at least thirty days before the date of the issue with which it is to take effect. Be sure to give your old address as well as the new one.

Publication and Business Office, The Lenox Building, 1523 L Street, Washington, D. C.

Entered as second-class matter at the Post-office at Washington, D. C., under the Act of March 3, 1879. Acceptance for mailing at special rate of postage provided in Section 1103, Act of October 3, 1917, authorized July 10, 1918.

Additional entry at Baltimore, Md., authorized July 23, 1925.

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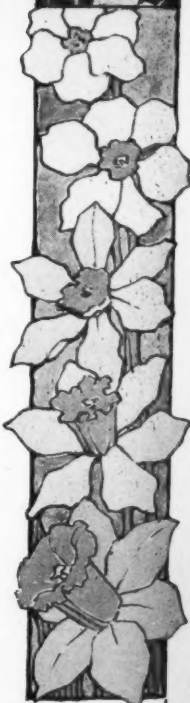
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AMERICAN FORESTS

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The Land Riddle of the Lake States

How Shall a Forty-seven Million Acre Empire of Deforested Land be Changed from a Liability to an Asset?

By JOHN A. DOELLE

ONE of the strangest but most characteristic habits of the human race is to take philosophically a misfortune which comes slowly. Sudden disasters are always marked with desperate endeavor to save and defend life and property. And yet it is the mill of the gods grinding slowly which grinds to powder.

If an earthquake should lay waste three-fourths of the state of Minnesota, or all of Missouri or twice the area of Maine, the American nation and the world would be staggered. Relief and rehabilitation would be miraculous in its speed, and least of all would there be any thought of abandoning the devastated area to idleness.

Just such an empire, through sixty years of exploitation and neglect, now lies unused and well nigh

forgotten in the cut-over country of Michigan, Minnesota and Wisconsin, where once grew some of the finest forests in the world.

Three facts stand out with respect to the forest lands of these states. First, the unproductive status of the lands is not being remedied by laying the blame on "economic forces;" second, their rehabilitation from a liability into an asset demands the exercise of real statesmanship; third, not only state governments and private capital must attack the problem but the aid and experience of the Federal Government must be secured.

According to the Select Committee on Reforestation of the United States Senate, the three Lake States have 10,000,000 acres still in virgin forest, 26,000,000 acres



THE GREAT RIDDLE—WHAT TO DO WITH IT?

Cut-over land in Northern Michigan, typical of much of the 700,000 acres which have already reverted to the State because the owners were unwilling to pay taxes upon it. A few straggling pines may be seen scattered over this area, but there are no seedlings, a condition due to repeated fires. Land of this character is being thrown back on the State for non-payment of taxes, at the rate of 30,000 acres a year.



Courtesy United States Forest Service

PLANTING TREES ON THE MINNESOTA NATIONAL FOREST

Typical cut-over Lake States land which must be reforested because of long neglect and repeated fires. Such work on the Michigan National Forest is done each year at a cost of less than \$3.00 an acre.

of culled and haphazard second growth, and 21,000,000 acres barren, a total of 57,000,000 acres of land classified as chiefly valuable for growing forests.

The states own 3 per cent of this forest land, a part of which is under administration as state forests; farmers own 23 per cent, and the Federal Government holds title to 2½ per cent in the form of National Forests created from public lands or Indian reservations. Much of the remaining 70 odd per cent is in the hands of the companies which logged it off, and of small non-resident owners. But the most significant fact about ownership is the acreage which appears on the delinquent tax lists. More than 700,000 acres of delinquent tax land has already reverted to the State of Michigan, and this is continuing at the rate of 30,000 to 40,000 acres a year. It is estimated that Wisconsin will have on its delinquent rolls this year no less than 3,000,000 acres which will come back to the counties under local practice and will put them literally in the real estate business. These counties for a number of years are said to have encouraged land promotion com-

panies to take over tax delinquent lands and sell them to settlers regardless of agricultural value. In Minnesota much of the tax delinquent land neither sells for taxes nor becomes actually the bona fide property of the state or county. On the other hand the lands are diligently "peddled" by the state for what they will bring. At one stage they may be sold for only one-fifth of the tax bill against them while at the time of the "fifteen year clean up sales" they are allowed to go for the amount of the state tax only.

Good agricultural lands in scattered areas may be found throughout this great 47,000,000 acre tract, but the farming history of the region between 1910 and 1920 rather tragically reflects its non-agricultural value. Minnesota, with a cut-over area of 18,000,000 acres, saw an increase of only 1,000,000 acres of improved farm land during the last decade. Wisconsin showed a falling off of land improvement amounting to 62 per cent, and now has 13,000,000 cut-over acres. Michigan, with 15,500,000 acres of cut-over lands, had an increase of only 93,000 acres of improved farm land from 1910 to 1920.

Nor are abandoned farms with their deserted buildings the only indication that agricultural settlement is not the solution of the Lake States cut-over land problem. A recent check-up by the Land Economic Survey of Michigan of a so-called development company's lands in Roscommon County yielded the following amazing figures. Of the 140,000 acres bought by this company in 1902 at 41 cents to 75 cents an acre and sold for \$7.50 an acre up, 16,000 acres are now assessed under titles said to represent the original company, 21,300 acres are owned by mortgagees, 24,400 acres have completely reverted to the state, 42,000 acres



Courtesy Michigan State Forester

THE START OF A NEW FOREST IN MICHIGAN

Planting on state lands has reached a high record of success on the State Forests of Michigan, thus demonstrating that by reforestation the cut-over lands can be transferred, within a reasonable time, from the liability to the asset column.

were bid to the state last year on the way to reversion, and only 110 acres are actually occupied as farms.

In Minnesota, Dr. Raphael Zon, of the Lake States Forest Experiment Station, estimates that at the rate of agricultural settlement maintained for the past 40 years, a century will elapse before even the better portions of the Minnesota cut-over area can be occupied as farms. It is tragically evident, therefore, that something more than agricultural settlement measures must be used.

It is no easy matter to convince the industries of these three states that timber is a crop and not a mine. Certainly its exploitation has been strictly on a mining basis and taxation practices which have been based on the mine rather than the crop idea have not made attractive the business of growing timber. Danger of being burned out, long time investment, and unfair taxation,—these have been the reasons or excuses for the unwillingness of capital to help keep these lands in the asset columns.

The states have made a start. Michigan and Minnesota have statewide fire laws and make vigorous attempts to prevent and suppress forest fires. Wisconsin has less than 10 per cent of its forest lands under adequate protection. In the new Pearson bill Michigan has a tax law that bids fair to work. Under it heavy taxes are deferred until time of crop yield on land which has young growth on it and is dedicated to timber growing. All three of the states have areas of State Forests under administration and Michigan especially has demonstrated the financial feasibility of reforestation state forests. It is not particularly encouraging, however, that out of a total of 2,738,000 acres of state owned land in the Lake States, only



THE RESULT OF FIRE PREVENTION

Norway Pine reproduction of this character would cover many idle acres today if fire had been kept out. National Forests in the three Lake States will help to bring this about over large areas.

644,000 acres are under administration as State Forests.

There is a hopeful chance that the remaining 10,000,-

000 acres of mature forest may be more conservatively harvested as better cutting methods are introduced by lumbermen and that improved fire protection will preserve the 26,000,000 acres of second growth timber. But in spite of present evidences of awakening, the continued idleness of 21,000,000 barren acres is a matter of grave economic concern.

In any forest problem of this magnitude it is natural to think of the Federal Government. The existence of National Forests in Minnesota and Michigan is due to the withdrawal more than a decade back of certain public lands. Their management by the Federal Government has been successful and suggests that



Courtesy United States Forest Service

PICNIC AND PARKING GROUNDS AT CASS LAKE, MINNESOTA

Demand for outdoor recreation areas has led the Forest Service to provide special grounds in the National Forests which are often equipped for safe cooking and camping, and which outdoor people truly appreciate.



Courtesy Banzhaf & Watson

NOT A SCENE FROM THE "BLACK FOREST"

Fifty year old second growth of Norway and Jack Pine west of Rhinelander, Wisconsin, much better than the average second growth pine to be found in the Lake States. But it shows what the land will produce.

the helping hand of Uncle Sam is worth reaching for if the Lake States are to bring all available forces to bear on their cut-over land riddle. For a number of years the Federal Government has co-operated with the states in fire protection. In 1924, for instance, the three Lake States received Federal aid, based on their own activity, to the extent of \$58,810, under the provisions of the Weeks Law of 1911. Some \$4,000 of this was to cover an emergency in Michigan. The recently enacted Clarke-McNary law authorizes the appropriation of enough co-operative fire protection money to allow the Federal Government to shoulder one-fourth of the amount necessary to put the forest lands of the country under protection. This is fair. It is but just that private owners and states should protect the remaining three-fourths. When they do, Uncle Sam may be counted on to hold up his end, but not to make unmerited donations meanwhile.

The part which Uncle Sam can play in working out the cut-over land puzzle is provided for by another section of the Clarke-McNary Act. This section—subject to Congress providing the necessary appropriations—makes possible

the purchase by the Federal Government of just such lands as make up the 47,000,000 acres in the Lake States. This authority is based upon the National need for timber and the protection of our navigable streams. The lands thus purchased would be managed as National Forests by the Federal Government, reforested with reasonable promptness and protected from fire so that new forests may be assured.

It is to make financially effective this purchase section of the Clarke-McNary Act that Congress will be asked next session to pass the McNary-Woodruff bill sponsored by The American Forestry Association and endorsed by more than forty other state and national trade and civic organizations. This bill, if passed, will make possible the acquisition

of some 2,500,000 acres in the Lake States, provided land can be secured at a fair price. Probably not more than eight to ten million dollars of the total forty million sought for a period of ten years, will be spent in this region. The original purchases planned for the White and Appalachian Mountains must be completed and a generous area of pine land in the South is needed to complete an eastern system of National Forests.

Two and a half million acres is a small part of the

[Continued on Page 558]



Courtesy United States Forest Service

TIMBER, WATER, SKY AND AIR

Spots like this—Minnesota National Forest—where recreation and rest draw tourists from many states, constitute a most important resource in the Lake States.



Shall the Stockmen Control the National Forests?

By OVID M. BUTLER

TREES or livestock? Which shall dominate the National Forests? That is one of the issues lurking in the background of the advancing offensive of western stockmen against the Forest Service.

This offensive is now gathering its forces in the West preparatory to a great drive for legislation in Congress this winter. Some stockmen already have openly thrown their cards on the table for property rights in the grazing lands of the National Forests. And if that right is vested in a special class of favored individuals by act of Congress, conservationists foresee a breakdown of the National Forests.

It is doubtful if western stockmen as a whole will press as a clear cut issue a demand for what amounts to a conversion of public property rights to private gain, not because they would not relish a legal title to the forage in the National Forests, but, because they foresee the improbability of success.

They have no precedent for their claim. The history

of our government lands contains no instance of Congress ever granting to stockmen the title to grazing land, basing the grant upon the fact that they have in

the past enjoyed its beneficial use as range. Under the homestead law a stockman, or any other American citizen, in the past has been allowed to acquire 160 acres of unreserved land by making it his home for a certain period, improving it as such, and grazing it with stock where not suitable for cultivation. In recent years and under certain conditions the area has been increased to 640 acres. But in all instances the occupation was personal, residential, and not willingly shared with other stockmen.

The more intelligent stockmen unquestionably appreciate that the threadbare plea for special privileges for the pioneers will not get far. No one denies that in the old days when the west was really west,

the stockmen were pioneers of the first order. But after all, these "old timers" were not so badly treated. For years, they were permitted free grazing, not only on the

THE ISSUE OF THE RANGE

DRIVES have repeatedly been made upon the National Forests. Now come the western stockmen fighting for the forage on Uncle Sam's mountain ranges.

Incensed over the proposal of the Forest Service to place what it considers a fair market price on the forage on 90,000,000 acres in the National Forests, they are organizing a great offensive to carry through Congress a special act which will

1. Reduce the grazing fees on the National Forests to rates equivalent to the Government's cost of administration. This would mean \$3,000,000 from the annual revenue of the National Forests.

2. Give legal status to grazing on the National Forests.

3. Authorize the creation of a commission with authority in grazing affairs superior to that of the Secretary of Agriculture.

4. Turn the unreserved public lands, aggregating 188,000,000 acres, over to the states or have them regulated by the Federal Government.

And back of these demands, conservationists see a more menacing purpose—the acquirement by the stockmen of a property right to grazing lands in the National Forests.

unappropriated public domain, but, on the forest reserves, and even down to the present day they are allowed to run their flocks without hindrance and without the payment of any fees on a public domain aggregating 188,000,000 acres. So while the specter of property rights may make its appearance in Congress next winter, it is now in the background, and it remains to be seen if any large number of stockmen will seriously attempt to put it across on the American public.

But the stockmen openly assert that they have grievances aplenty and in advancing their claims many among them are leaving no stones unturned to picture the Forest Service as a bureaucracy which

knows neither justice nor mercy. From Twin Falls, Idaho, one of their organizations is serving cleverly prepared propaganda which the western papers are freely passing on to the public—a public which in its dependency upon the National Forests for wood, water and recreation outnumbers the stockmen a thousand to one. As yet the public is not taking a hand but there is no doubt that it will when it awakens to the fact that its own property is at stake—not merely the value of the forage involved, which may be capitalized at something over one hundred million dollars, but the intangible values which properly controlled grazing in the western mountains yield in the form of water for cities, towns, farms, orchards, factories and electric power.

Of the contentions of the stockmen, those which thus far stand out more or less clear-cut, are:

First, Uncle Sam should not charge them for the right to graze their stock on the National Forests at rates based on the commercial value of the forage, but merely at the cost of administering the grazing business. As between their concept and that of the Forest Service, which holds that forage on the National Forests is a natural resource of great value, there is a great differ-

ence in dollars and cents. This difference may be illustrated by applying the two views to the stock grazed upon the National Forests last year.

In that year the 30,978 grazing permittees paid \$1,912,915 for grazing 1,722,271 cattle and 6,330,376 sheep. At rates now advocated by the stockmen they

would have paid \$670,008 which represented the cost of administration to Uncle Sam. At the rates which the Forest Service believes represents a fair value of the grazing rights they would have paid \$3,517,006. The difference is \$2,846,997. That is the direct issue, so far as annual grazing receipts from the National Forests is concerned.



THIS PICTURE MIGHT BE CALLED "THE GOAT IN THE CASE": HOWEVER, IT IS JUST A VIEW OF A TYPICAL GOAT RANCH IN THE LINCOLN NATIONAL FOREST, NEW MEXICO. APPROXIMATELY 100,000 GOATS ARE GRAZED UNDER PERMIT IN THE NATIONAL FORESTS

Second, Congress should pass a law giving legal status to grazing on the National Forests, thus making grazing more secure than under present regulations of the Secretary of Agriculture in whom authority for the granting of grazing privileges now rests. With this, they would create a Board of Appeals which in grazing matters would be superior to the Secretary of Agriculture. It has been the policy of the Department of Agriculture to accord its grazing permittees on the National Forests the greatest measure of privileges consistent with reasonable consideration to the primary purposes of the forest, namely timber production and watershed protection. The proposal of the stockmen raises the issue,—shall those primary purposes remain primary, or shall Congress provide for a commission with legal powers to subordinate the necessities of watershed protection and timber production to grazing claims?

Third, the unreserved public lands should be turned over to the states in which they are located or placed under a Government Department, given legal authority to regulate grazing and to dispose of the forage at the cost of administration. Opinion among the stockmen is divided as to whether the unreserved public lands

should be turned over to the states in which they are located, should be placed under the administration of the Forest Service, or should remain with the Department of the Interior for management. Irrespective of opinion on this point, some of them are said to favor having the untimbered areas in the National Forests excluded and placed under the grazing administration provided for the unappropriated public lands. And therein lies another threat to the integrity of the National Forests.

The Forest Service is not opposing the general principle of a law which authorizes the Secretary of Agriculture to put the use of forage on the National Forests on the same contract basis as the use of timber; neither does it oppose the regulation of grazing on Uncle Sam's unreserved public land, or the creation of Boards of Appeal with properly limited authority. It has indeed advocated regulated grazing on the public domain for a good many years. But it does oppose the placing of the grazing fees at the cost of administration, the granting of a fixed property right in the National Forests, and the creation of a commission with authority in grazing matters superior to the Secretary of Agriculture.

The Chief Forester recently stated: "We must recog-

nize the fact that, whatever we may say about it, the forage on the National Forests is a commercial commodity. It is exactly like any other forage. Forage is one of the great commercial commodities of the Western States, and its character in that respect is not changed by property lines. Range is bought and sold and rented every day. It has its markets and its prices. It is just as much a commercial commodity of the West as are the livestock products derived from it or the standing timber on the National Forests. It is only fair to point out that the users of the National Forest ranges have for many years commercialized their forage business."

Within the National Forests in the United States, there are 90,000,000 acres on which the grazing of livestock is allowed under permits. Why, it is asked, should the Government with one hand single out the western stockmen as beneficiaries by giving them forage worth millions of dollars at merely the cost of the giving, and with the other hand hold the lumbermen to the full commercial value of the timber? Furthermore, declare the conservationists, the principles underlying the stockmen's claims, if applied to the other resources of the National Forests, would speedily dismember the administration of



A BAND OF SHEEP BROWSING ITS WAY TO THE HIGHER SUMMER RANGES IN THE GALLATIN NATIONAL FOREST, MONTANA. UNCLE SAM'S WESTERN FORESTS FURNISH RANGE TO ALMOST TWO MILLION HORSES AND CATTLE AND OVER SIX MILLION SHEEP AND GOATS. OWNERSHIP IS DIVIDED AMONG STOCKMEN, RANCHERS AND HOME-STEADERS, NUMBERING IN THE AGGREGATE 32,000 PERSONS. THE REVENUE FROM THE SALE OF FORAGE IS SECOND ONLY TO THAT FROM THE SALE OF TIMBER

one of the greatest natural resources owned by the American public.

What has aroused the western stockmen to declare war on the Forest Service and its handling of grazing on the National Forests? To answer that question one must look briefly at the history of grazing on the National Forests. Prior to 1905 the National Forests, then called forest reserves, were under the administration of the Department of the Interior. Grazing was more or less unregulated. No fee was charged for forage. It was a case of every man for himself and the devil take the hindmost.

When the reserves were transferred to the Department of Agriculture in 1905, the edict went out that beginning with 1906 a fee would be charged for grazing on the National Forests, and a set of orderly regulations were prescribed. The initial grazing fee was a modest one. Stockmen now claim it was based on the cost of administration, but the Chief Forester in discussing the point before the Public Lands Committee of the Senate asserted that the fee was meant to approximate as nearly as possible, in the absence of comprehensive data, a fair compensation for the commercial value of the forage at that time. From the very beginning, the grazing fees on the National Forests, with the possible exception of Arizona and New Mexico, have been recognized as extremely low. They have been increased from time to time, but never to a point comparable with prices received for forage on private lands within or adjacent to the National Forests, due to the absence of comprehensive data on the market value of the forest ranges. The last increase was in 1919, which brought the fees to a point approximately 150 per cent above those of 1906.

The Forest Service has been criticized from time to time for disposing of the forage on the National Forests at prices far less than its commercial value, while charging market prices for timber and other resources put to commercial use. In February, 1920, Congress, through the House Committee on Agriculture, brought strong pressure upon the Forest Service to put into effect a three hundred per cent flat increase in the grazing fees on the National Forests. The Forester at that time demurred on the grounds that an immediate increase in grazing fees would be unfair to a large number of stockmen who held five-year permits under which the Government in good faith was obligated to continue the rates in force until the expiration of the permits. The Forester also declared that data to determine the actual value of the different ranges was not available. As an alternative the Forest Service proposed a comprehensive study of the forest ranges to ascertain fair grazing fees to be put into effect upon the expiration of the five-year permits then outstanding.

Four years were spent in making this study which included a survey of the rental value of private range lands which could reasonably be compared with the grazing lands in the National Forests. More than two thousand

separate land leases, aggregating some twenty million acres of private grazing land, were studied, in order to determine a fair value of the forage on private grazing lands comparable to those within the National Forests.

Out of this study came the Rachford Report. Broadly, it showed that private lands in close proximity to the ranges in the National Forests return their owners approximately 100 per cent more than Uncle Sam is getting for grazing in the National Forests. For example, the average grazing fee on private lands leased to the stockmen averages approximately twenty cents a month for cattle as against eleven to eleven and a half cents on the National Forests, and for sheep, six cents a month on the private lands as against three cents a month on the National Forests. Only in one section of the West did the appraisal show Uncle Sam's grazing fees to be in excess of what the forage was worth based on fair local rates. This was in Arizona, and the Forest Service promptly reduced the rates.

This appraisal of National Forest forage, according to the Forest Service, fully substantiated an average increase in the present grazing fees of approximately seventy-five per cent. Prior to his death, Secretary Wallace, of the Department of Agriculture, served notice on the stockmen that upon the showing of the Rachford Report an increase in grazing fees would go into effect January 1, 1926. He did not put the increase into effect immediately in consideration of the fact that the stock business in the west at that time was in a state of "hard times." With the announcement of the proposed increase, the stockmen figuratively got in their saddle and rode to Washington with fire in their eyes. Secretary Wallace stood firm, but after his death, Secretary Gore granted the stockmen an extension of one year in the date on which the increased fees would become effective, or to January 1, 1927, in order that his successor might have ample time to review the whole case and finally fix the new fees to be put into effect. The Rachford Report, with its proposed increase in grazing fees, is, therefore, in the hands of the present Secretary, William M. Jardine, for his approval or rejection.

The Forest Service maintains that the stockmen have not been able successfully to challenge the accuracy of the report and that the rates proposed under the ten-year grazing permits which have just been put into effect, provide a fair and stable basis for the business. "If the purpose of the Forest Service were to fully commercialize the ranges or to charge all that the traffic would bear," the Chief Forester told the Senate Public Lands Committee, "the means of doing that would be extremely easy. We would do exactly what the Interior Department has done on Indian reservations and on reclamation withdrawals where, as a result of offering ranges for competitive bids, fees are now received that are greatly in excess not only of our present rates in the National Forests but materially in excess of the rates proposed by the Rachford appraisal.

"That comes from letting the range through the competi-

(Continued on Page 574)



A VIEW FROM THE CALVIN COOLIDGE STATE FOREST OVERLOOKING THE BIRTHPLACE OF THE PRESIDENT AND PLYMOUTH NOTCH.

The Calvin Coolidge State Forest

By PERRY H. MERRILL

IT was in Pinney Hollow, Vermont, that Jonathan Pinney, an ancestor of President Coolidge, built the first log cabin in the town of Plymouth in 1800. Little did he suspect that one hundred years later, and almost within a stone's throw of his rude cabin, would a tract of woodland be set aside for the use and enjoyment of the people of the state under the name of the Calvin Coolidge State Forest.

And yet, history has so written. The Vermont Forest Service recently acquired 175 acres of land adjacent to the old Coolidge homestead at Plymouth, and Governor Franklin Swift Billings has named the tract in honor of President Coolidge in recognition of the President's deep interest in forestry.

The new forest bearing the President's name is on the main highway leading from Plymouth through what is known as Pinney Hollow to Bridgewater Corners. Approximately 100 acres of the tract is covered

with a good stand of white birch which shelters an undergrowth of red spruce, sugar maple and white ash. The remainder of the area is open land and it is the plan of the state to reforest it next spring with 100,000 young trees of white spruce and red pine.

The Vermont Forest Service plans eventually to make the Calvin Coolidge State Forest the largest in the state. This will be accomplished by acquiring additional areas from time to time. There are now fifteen state forests in Vermont with an aggregate area of 30,300 acres. The largest is the Groton State Forest of 15,000 acres. These forests are serving not only as demonstration areas showing proper methods of handling woodlots, but they are serving the public as recreational retreats without interfering with their use as timber producing tracts. Camp sites are leased at nominal rates and tourist camp grounds are being established. A camp ground will soon be laid out on the Calvin Coolidge State Forest.

AMERICAN FOREST WEEK CONFERENCE

Ex-Governor Frank O. Lowden, of Illinois, Chairman of the American Forest Week Committee, has issued a call for a general conference to be held at the United States Chamber of Commerce Building, Washington, D. C., on the morning of September 28. The object of the Conference is to make plans for a permanent organization and to arrange well in advance for a nation-wide observance of American Forest Week next year. All organizations and individuals interested in American Forest Week and desirous of becoming identified in a national way with its activities are invited to attend the Conference.

The One Who Talked and The One Who Worked

By P. M. BARR
Yale Forest School, '25

This story was awarded first prize in the 1924 contest at the Yale Forest School for the best paper of a popular nature pertaining to forestry. The contest was one of six held at universities that offer courses in forestry, and at which Mr. Charles Lathrop Pack has established forestry foundations for the annual award of prizes for editorial work.

The One Who Talked

THE Honorable William Brown rose slowly to his feet behind his desk on the floor of the Legislature, cleared his throat, and began to speak. With boisterous sentences and the time-worn phrases of the professional politician, punctuated with vigorous thumps on his desk, he launched a tremendous attack on an item in the appropriations. This was no haphazard oratory by the Honorable William; for weeks he had waited patiently for this moment, and had laid his plans carefully. As he spoke he noted with satisfaction that two of the party heelers from his district sat in the visitors' gallery; no coincidence, that! As he spoke he knew that on the editor's desk of the party newspaper in his home town there lay a copy of his speech which tomorrow would appear under the headlines, "Honorable W. Brown Flays Government Waste." He had attended to that.

He knew only too well that such headlines were badly needed to bolster up his political reputation in a district where he had never been able to secure more than the barest margin of a victory in a long series of election campaigns. And now as election time loomed up unpleasantly close again, after a legislative session in which he had felt the storm signs of declining popularity among his constituents becoming all too evident, he had searched desperately for an opportunity to thrust himself into the political limelight again. The

opportunity offered itself in a proposed appropriation for a state forest in the part of the state farthest from his own district. There was not much money involved, and as far as he knew there was no good reason why it should not be spent; as a matter of fact he knew little about the subject. But the people in his district were not interested in forests, that much he did know, and in all his political experience the old slogan of "Cut Down Expenses and Reduce Taxes" had never failed to secure votes.

The Honorable William made a fighting speech, demanding the withdrawal of the offending item, denouncing the proposed waste, and naming a hundred ways in which the money could be better spent in his own district. The old slogan was used freely again, his desk suffered a perfect bombardment of thumps. Other members of the legislature, uneasy in the face of the oncoming election, hurried to his assistance. The appropriation was defeated and the champion of economy felt a pleasant glow of satisfaction; his party heelers went home with a replenished supply of political ammunition to bang away in campaign meetings; the headlines were in red ink.

In the following election the Honorable William Brown was returned to the State Legislature as the member for his district.

The One Who Worked

RANGER BILL BROWN turned stiffly in his saddle as his horse came slowly over the last pitch in the switchback where the trail came out on the cutbank above the river. The tired animal needed no word from its rider to stop, but stood motionless, with its head hanging limply and the flies buzzing about its sweating flanks and shoulders unheeded. The ranger leaned across the saddle horn, one leg swinging free from the stirrup, and gazed silently at the scene before him. Below, the river swept smoothly around a great bend among the cedars, rippled across the boulders at the bottom of the cutbank, and flowed swiftly on, disappearing around another bend a quarter of a mile down the valley, leaving a quiet backwater just below the high bank, where flecks of foam circled noiselessly and interminably. Beyond, the unbroken green canopy of the forest swept across the bottom of the valley and stretched up the mountain side, the gray-green of

the firs and cedars deepening to a darker shade where the spruce and balsam covered the upper slopes. In the distance the panorama of hills and rocky peaks was dimly visible through the haze of the summer afternoon. The stand of timber here was the best in the whole district; unscarred by fire or the ravages of lumbering, it stretched for miles along the river valley, an almost priceless living resource able to supply forever a thousand needs of the rich farming and industrial communities that would some day be found along the lower reaches of the river.

Ranger Brown was tired,—he had never been so tired before, he thought. Through a long and tiring fire season he had been forced to strain every effort to match his slender organization of men and equipment against the almost irresistible force of the fire demon. A dozen times it seemed as if the red enemy had won, only to be checked on the fire line by

another heartbreaking effort with ax and shovel. Now, when there seemed to be a lull in the struggle, with every fire out or under control, he was on his way to the ranger cabin up the river where the road cut across the head of the valley, to "rest up" a few days, and get rid of some of his long overdue correspondence and reports. He would be at the cabin by nightfall; how good it would be to get cleaned up again, have supper in the old shack, and tumble into bed, between clean blankets, while the pony rolled clumsily and contentedly in the corral or munched tall cool grass in the little meadow behind the cabin.

As his eyes roved across the hills and up the valley, he suddenly stiffened a little in the saddle, sat motionless a moment or two,—then reached for the field glasses hanging in their case at the pommel. He trained them on a point across the valley for a long time, then dismounted and levelled them upon it again. He had made no mistake, a thin wisp of smoke was rising lazily from a patch of fir on a little knoll just below the dark green of the spruce on the long slopes of the mountainside. It was three or four miles away, he guessed. He put the glasses in their case again and thought it over. There was no one up at the cabin, and the phone line was down. The nearest help was at the Ranch, ten miles down the river. If he went on to the cabin tonight and came back in the morning he couldn't get to the fire much before noon; most likely it would be too big for him to handle then. But to tackle it now, alone, was too much; there was a limit to what a human being could be expected to do, anyway. But what if it got away? He instinctively pictured the clouds of

smoke rolling up the valley and the flames roaring up the green slopes, the dull crash of the trees falling * * * * Oh, well. * * * *

Ranger Bill Brown tied his horse to a tree, unfastened his ax and shovel, and loosened the saddle cinches. Tools on shoulder he walked wearily down the switchback, waded the river where it rippled over the boulders above the backwater and disappeared among the cedars on the opposite bank. Two hours later he had reached the fire, a mass of smouldering embers in the fallen trunk of a lightning-riven fir. By tomorrow the red enemy would have burst into life in the dry litter beside the fallen tree and would have been sweeping up the valley, irresistible.

The sun was setting behind the hills when the ranger had ringed the charred wood with bare earth and the last flame was smothered. It was quite dark when he reached the river again and heard the friendly whinny of his pony on the opposite bank. He stumbled through the swift shallow water again, his legs dumb with fatigue, climbed wearily to the top of the cutbank, and in a few minutes rode along the river trail through the darkness. The forest seemed very quiet tonight; as he rode the branches brushed lightly against his face and arms—there seemed almost to be a friendly, grateful touch in the feel of them.

The following spring Ranger Bill Brown was notified that the ranger station on the river trail was to be closed due to insufficient appropriations by the government and that his services would no longer be required.

Winners of the Picture Title Contest

From several hundred titles submitted for the picture published in the July issue of **AMERICAN FORESTS AND FOREST LIFE**, showing a wonderful growth of young longleaf pine, which has been protected from forest fire, on the lands of the Great Southern Lumber Company, near Bogalusa, Louisiana, the judges announce the following prize winners:

FIRST PRIZE: \$10 "PROSPERITY FOR POSTERITY," title submitted by Wilson McA. Kleibacker, 803 S. Negley Avenue, Pittsburgh, Pennsylvania.

SECOND PRIZE: Hough's "Handbook of Trees of Northern United States and Canada" **"PROTECTED WE STAND, NEGLECTED WE FALL,"** title submitted by Nicholas E. Crosby, "The Pickets," Pine Hill, New York.

THIRD PRIZE: One year's subscription to **AMERICAN FORESTS AND FOREST LIFE** **"KEEPING FAITH WITH UNBORN GENERATIONS,"** title submitted by Mrs. Caroline B. Gilliken, 11 West Lancaster Road, Batter Court, Richmond, Virginia.

The judges ask that **HONORABLE MENTION** be given to the following titles:

**"NO FIRE, NO HOGS,
IS THE WAY TO GROW LOGS."**

Title submitted by Samuel T. Dana, Amherst, Massachusetts.

"THE FUTURE CAPITAL OF THE NATION;" title submitted by Annie M. Lawton, New Bedford, Massachusetts.

"THE DAWN OF A TOMORROW;" title submitted by Cherry DeVore, Valley Forge Lodge, Mt. Wilson, California.

"PINE HOPE;" title submitted by Mrs. John H. Sizer, Savannah, Georgia.

"PROTECT ME NOW AND I WILL PROTECT YOU LATER;" title submitted by Mrs. C. A. Ladd, Downers Grove, Illinois.

"LET LIVE FOR THE FUTURE;" by Irvin B. Tiederman, Mahwah, New Jersey.

"THE BIRTH OF A NATION;" title submitted by D. A. McDonald, Calgary, Alberta, Canada.

"FRUITS OF FIRE PREVENTION;" title submitted by Roy L. Weeman, Winthrop, Washington.

The judges were impressed with the many excellent titles submitted, and the great number which expressed a real message seen in young thriftily growing forests. It was necessary for them to reject a number of titles which had already been used as forestry slogans, or were merely adaptations of the ones suggested in the announcement. The editor and the judges desire to express their great gratification over the interest which the contest stimulated.

Mount Rainier's Magic Carpet

By P. M. FOGG

MOUNT RAINIER, WASHINGTON, the third highest peak in the United States, is justly famed for its score of crevassed glaciers, its dense fir forests, and the majestic sweep of its snow-clad slopes. But none of these surpasses in fascination and charm the profuse array of delicate wild flowers that carpet the Mountain's sides during the summer with ever-changing tints and patterns. They begin to bloom about the first of July; some even push their way through the thinning snow banks, while others in the fall resist the early flurries of flakes, until finally buried from sight beneath thick, white blankets.

John Muir paid a marked tribute to Rainier's flowers when he wrote of them that they are "so closely planted and luxuriant that it seems as if Nature . . . were trying to see how many of her darlings she can get together in one mountain wreath. . . . Altogether, this is the richest subalpine garden I ever found, a perfect floral elysium."

Including the trees, flowering plants and ferns, about 532 different varieties grow on the Mountain, some of which, it is believed, occur

etation of some kind are found. Even on the warm rocks of the crater's edge, mosses and lichens cling, where steam issues from the crevices.

The greatest profusion of flowers occurs, however, at about 5,400 feet above sea level. At this elevation there are a number of open "parks" or clear spaces on the slopes, where the trees grow only in small groves and clumps. Here the flowers, having greater access to the sunshine than is possible in the dense forests below, find conditions most agreeable for their full development.

At the lower elevations, among the tall firs, cedars, maples and hemlocks, the Indian pipe or ghost plant flourishes in the half light of the forest. Its pearly white flower on a curved stem resembles a clay pipe. These flowers grow in thick clusters, especially during July and August. The plant has no leaves, all green coloring matter necessary to support them having been lost. Consequently, it takes its nourishment from the decayed matter left by other vegetable life.

Among the other leafless plants found in the forest is the barber's pole, striped red and

nowhere else. At all altitudes, from the base to the lofty summit of this storm-swept old volcano, 14,408 feet high, flowers and veg-



white, and the pine sap, whose brown stem grows three or four feet high and supports many round blossoms. The Canada dog wood,

INTO THE WEAVING OF THIS RUG OF MANY HUES AT THE FOOT OF BEAUTIFUL MOUNT RAINIER, ENTER MYRIAD WILD FLOWERS, RUNNING THE GAMUT OF COLORS, FROM DELICATE TINTS OF DAWN TO THOSE OF THE BLAZING SUNSET

known in parts of the east as bunchberry, is also a forest flower. It bears a delicate, attractive little white blossom, and the alpine beauty, a close relative of the lily-of-the-valley, is one of its neighbors. The white forest anemone, several members of the orchid family, wild bleeding heart, ground pine, and a number of ferns, all contribute, together with many other varieties of flowers, to beautify the primeval forest which covers the Mountain's lower slopes.

At somewhat higher altitudes, where the lower ends of the glaciers meet the forest, and the tall trees give way to smaller types, there is a change in the character of the flower growths. Gray lichens droop from the trees. The white rhododendron, said to be poisonous to some animals, puts in an appearance; and among the moss is found the ovate-leaved salal, an oily plant bearing small white flowers. This growth lies close to the ground and since it will burn rapidly, sometimes helps to spread forest fires.

The twin-flower, trailing its dainty pink blossoms, adds a touch of contrast to the

creamy white color of the small fragrant flower of the squaw-grass, or bear-grass as it is sometimes called. This plant, whose stalk is about three feet high, is used by the Indians for basket making. At this altitude sweet-after-death, or smelling leaves, is a common white flower, and the bird's foot bramble, a morsel favored by pack horses, bears a strawberry-like blossom on its trailing vine.

Higher yet on the Mountain, where the trees occur in smaller groups, and broad open meadows are quite

common, Rainier's flowers abound in their most bewildering variety. This area is from 4,000 to 5,500 feet above the sea. Here in the moist soil the shooting star's showy pink is very conspicuous, and the purple asters grow head to head near the rosy spiraea, the monkey flower and the arnicas.

In the drier ground the plants provide a variegated pattern of wondrous colors such as to astonish and delight even those quite familiar with mountain wild flowers of other lands. The most numerous, and

one of the loveliest of the favorites is the white avalanche lily, sometimes called dog's-tooth violet or mountain deer tongue. This delicate plant pushes its leaves and its flowers up through the snow in the early part of the season, and often covers considerable areas. From seven to ten blossoms grow on a single stem in some instances, although a single one is the usual number. A yellow species of this lily is also found, and a yellow alpine buttercup that springs up as soon as the snow has melted away. The western anemone, another



FORM AND PURITY OF TINT AND TEXTURE MAKE A CLOSE STUDY OF THE EXQUISITE BELL-SHAPED FLOWERS OF THE WHITE HEATHER WELL WORTH WHILE

of the early species, bears large lavender blossoms.

As fast as one variety of plant blooms and fades another comes to take its place, and as the season is comparatively short at such altitudes the flowers seemingly must hurry in order to fulfill Nature's varied and colorful program.

The Arctic lupine's purple is very noticeable and abundant, and combines with the brilliant red of the Indian paint brush and the white of the avalanche lily



THE DAINTY "SHOOTING STAR"
PREFERS A MOIST SPOT

distinctive shades into the patterns of the magic carpet to create an effect at once marvelous and rare.

One of the most popular of the later flowers is the blue gentian whose large, funnel-like blooms are found even in October, protruding through a foot of snow. Indeed, several varieties of flowers are but slightly affected by the flurries of early fall that soon melt away. The winter's snows preserve the stems and bodies of these late plants so well that when the following season arrives they are sometimes mistaken for new growths.

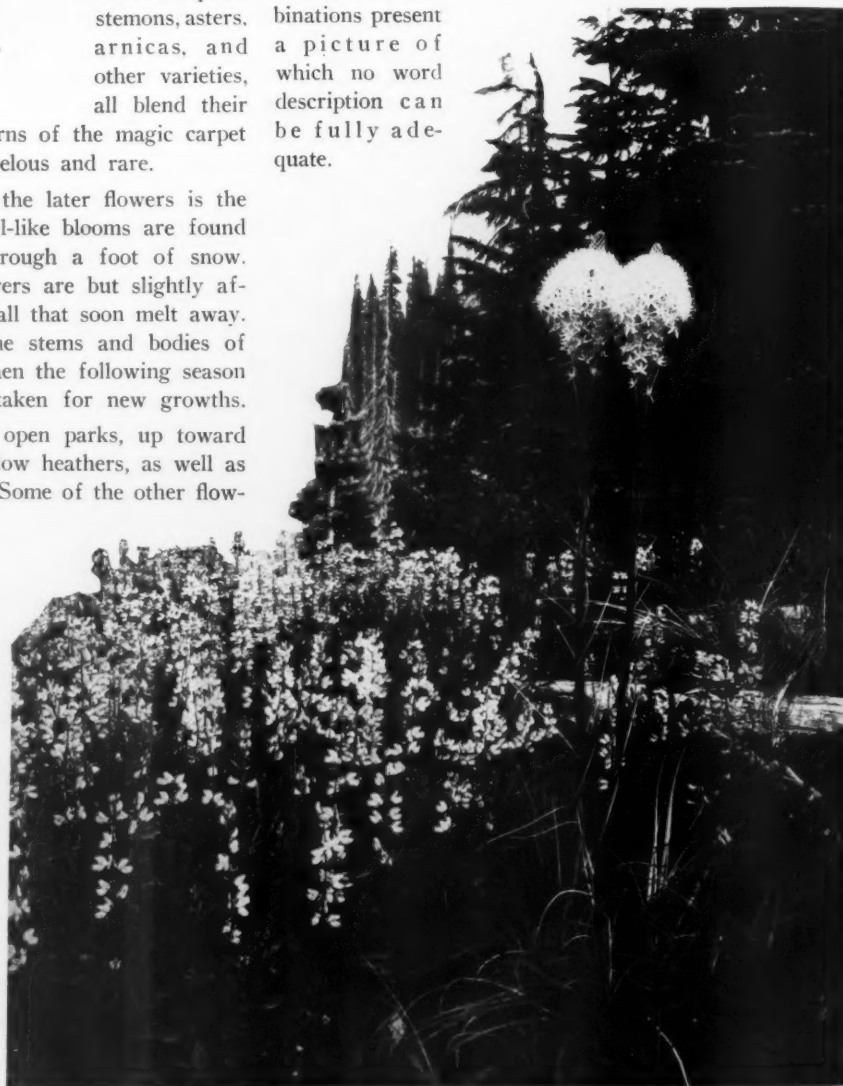
Above the brilliantly colored open parks, up toward the timber line, the red and yellow heathers, as well as a white variety, are to be seen. Some of the other flowers, more abundant below, still persist at these levels, though with less vigor. In rocky spaces, members of the saxifrage species grow in large, mat-like formations bearing little white flowers. The squaw-grass finds a foothold too, and continues to bloom long after others of its kind far below have gone to seed. Here, where the hardy alpine fir, the mountain hemlock and the Alaska cedar stand guard as the highest outposts of the trees, the golden aster sends up its bright blossoms and the golden rod, now dwarfed, struggles for a livelihood. A few Indian paint brush plants and woolly cudweeds occur also among the dwindling varieties at this elevation of 7,000 feet.

to create a harmony in national colors. Then too, the red heather, the creamy valerian, the white mountain dock, the yellow monkey flower or *mimulus*, the wild hellebore's greenish-white blossom and the yellow mountain dandelion, besides a host of pentstemons, asters, arnicas, and other varieties, all blend their

Beyond this, among the fields of pumice and the great, bare rocks of Rainier's higher reaches, a few flowering plants may still be seen. Lyall's lupine, for example, splotches the cliffs in dense mats of purplish blue up to about 9,000 feet, coming as soon as the snow leaves and blooming until mid-August. The brilliant rose and purple pentstemons creep over the rocks almost up to the 8,000 foot level, and the diminutive lace fern clings to crevices with its tender roots, in company with the kinnikinnik, the phlox, a pink aster, and other species.

At 10,000 feet, near Camp Muir, a yellow mustard is found in company with a member of the same family whose foliage and flowers are both white. These two plants are the highest flower-bearers; but there are two grasses and a sedge which grow even higher on the peak.

Mount Rainier's flowers and their ever-changing and unexpected combinations present a picture of which no word description can be fully adequate.



A BACKGROUND OF ALPINE FIRS GIVES A MORE STARTLING TINT TO THE BLUE OF THE LUXURIANT LUPINE, ABOVE WHICH THE TALL-STEMMED SQUAW GRASS SPRINGS

From the Place of the Bad Woods

A Lumbering Operation Right in the City of New York, Recalling Forest Events of the Revolution

BY P. L. SPERR

"MONOCKNONG—The Place of the Bad Woods," is said to have been one of the Indian names for Staten Island. Here shipbuilding began in prehistoric times when the Indian secured a log and made himself a water craft by hollowing it with fire. When the final sale of the island to the Whites was made in 1670, the Red Men reserved the right to two kinds of trees. Quite a ceremony was made of that sale. The Indians "presented a sod and a shrub or branch of every kind of tree which grew upon the island, except the ash and elder—some say the ash and hickory." They thereby indicated that they had transferred all rights, excepting to the trees which they had reserved, and it has been claimed that they exercised the right to gather these woods for their boats and baskets down to the close of the colonial period.

Perhaps it is not surprising that shipbuilding should continue to be a

Staten Island industry although the place is now one of the five boroughs of the City of New York, but who would suppose that timber for the ships would still be cut there?

The ancient forests were called on for homebuilding and shipbuilding materials, and for firewood, by the colonists. In places they were cut down ruthlessly to clear the land for cultivation. Even worse were the cuttings due to British demands during the War of the Revolution. Much wood was used for building the

barracks and defenses of the soldiers who occupied Staten Island, but the need of firewood caused the greatest destruction of the old timber. The forces and civilians in New York, as well as the garrisons on the island, had to be supplied with fuel. So much cutting was done to fill these needs that a traveler early in the last century wrote:

"No part of the wood in Staten Island, on Long Island, or within any inconsiderable distance from New York, is of great size, the British, during their occupation of New York in the Revolutionary War, having cut down for fuel all the wood within their reach."

How some of this cutting was managed is told in the "Reminiscences of David M. Van Name:"

"Moses Van Name was my grand-father and during the Revolutionary War, he was called upon by an English officer to obey the order of Sir William Howe. During his en-

campment on Staten Island, the people had become so terrorized by the treatment of the English soldiers, they were willing to consent to most any request, not for love but for fear. Winter approaching, soldiers in camp, they needed fuel. An English officer was commissioned to call on the farmers or captains who owned wooded tracts, each to cut so many cords of wood and deliver it to be placed on my grandfather's vessel to be delivered at quarantine.

"They dared not refuse, expecting no returns for



YES, THIS IS LITTLE OLD NEW YORK

Full view of the portable mill in operation in real woods on Staten Island. In the foreground is the skidway of poles on which logs are rolled on to the carriage, which takes them to the saw.



LOGS READY FOR THE MILL AT ELTINGVILLE

It was on Staten Island that the British, during the Revolutionary War, forced the Colonial settlers to destroy the forests to supply their soldiers with firewood. The forest above is probably the third crop of trees to grow on the land.

their wood and labor. After the delivery was complete, one of the officers asked my grandfather if he would like to have some money. Imagine the surprise by such an interrogatory. He was delighted to answer in the affirmative. So the commissioner gave him an order to go to the city of New York at a certain building of business conducted by the English government at the present Bowling Green.

"So one fine day he set sail for the city; with his order he entered and was ushered into the banker's office. Such a sight as never to be forgotten by him. Gold piled on a table uniformly in rows, representing stipulated amounts in each pile. The banker in charge took a large knife and placed it between rows and put it outside, which constituted the value of the order. The officer commanded my grandfather to put it in his hat and to count it when he got home, and divide it among his neighbors in proportion to the wood furnished by each, and take out for his services in delivering. Rejoicing fell on the lips of all."

Mention is again made of the firewood cut on Staten Island in connection with the raid by the Americans under Lord Stirling. The invasion was made on a bleak, wintry day, and when the Continentals came upon piles of

cordwood, cut for the British, they got some comfort out of burning it themselves.

There were profiteers in those days, too, and during the hard winter of 1779-'80 prices went sky-rocketing. The result was a series of proclamations from the British governor of New York, limiting the charges. One, for instance, set the price of "walnut cordwood, or any other kind of wood" at four pounds per cord. There were also proclamations calling for the delivery of wood, and the governor must be credited with an order against cutting from the estates of people "supposed to be in rebellion."

With all this cutting, there may scarcely be a tree on the island which dates to the time when the Indians sold The Place of the Bad Woods to Governor Lovelace; and yet from time to time somewhere on Staten Island there is a lumbering operation of considerable size. For over a quarter of a century, Staten Island has been a part of the City of New York. It is the Borough of Richmond. Still there are none of the appearances of the metropolis, and no greater contrasts could be found than in the development of the two islands, Manhattan and Staten. The building of ships continues to be one of the chief industries of the latter and as late as last summer her own forests yielded some of the best oak for the vessels and



UNLOADING LOGS FOR THE MILL ON STATEN ISLAND

The trees were cut within a few miles of New York's subway. There were thirty acres of woodland, with a fine growth of timber.

docks. Down in the south central part of Staten Island, near the town of Eltingville, the loiterer might have seen the picturesque sights of a lumbering operation from the early Spring to the late Summer of 1924. There are some beautifully forested areas in that section. Perhaps the best and most famous are the Woods of Arden, stretching from Eltingville along Richmond Avenue towards the coast. The present operation was on the opposite side of the town. The place known locally as "the Banker's Woods" was to be cleared for a real estate development. In wet weather the land was marshy, and a little creek, called Betty Holmes' Brook, began there to babble along under Richmond Avenue and through other woods until it found its way into the Fresh Kills. Children of the neighborhood picked the wild azalea blossoms there in the Spring, and passing motorists may have broken off branches of brightly colored leaves in the Autumn. Otherwise the land had gone uncropped for many years. The conservationist may get something out of the fact that in that time it had produced a second or third growth of good timber.

A queen bee, having no thought that things would not go on forever as they had been, brought her swarm to a hollow tree by the roadside. The honey-making had just begun when the lumbermen appeared. Most of



TIMBER KNOWN AS "FLITCH"

This is suitable for shipbuilding and in great demand. These curved pieces are needed for the stern gunwales of boats.

the birds arrived a little later and, seeing what was going on, built their homes elsewhere. A catbird did some scolding about the matter, and the bees were vehemently angry when finally evicted, but most of the inhabitants moved along with the stoicism with which old residents generally accept the "improvements" which hinder their accustomed ways. Indeed, six squirrels were seen having a final frolic on one of the big trees before moving along.

The land was now in the hands of real estate men. Hopes of subway connection with Manhattan via Brooklyn, had brought a boom to Staten Island. It seemed time to clear and "develop" the property, and the woods had therefore been sold to the lumbermen.

There were thirty acres of the woodland, and it had a fine growth of timber. Approximately 100,000 feet of sawed lumber, besides a large number of poles and a quantity of firewood, was the estimated yield.

From ten to a dozen men were busy for several months on this work, cutting trees, hauling out the logs, milling the lumber, and trucking the planks and firewood. Two axemen were employed at felling the trees, trimming off the branches, and cutting the trunks into proper lengths. The logging required three teams of horses with their drivers, and four or five men did the work around the



LUMBER FOR EXPORT

The second smaller of two trucks of oak planking cut at Eltingville, on Staten Island, which was shipped to South America.

portable mill which was set up over at the edge of the woods. As fast as the lumber was cut up it was delivered to one customer or another by a 10-ton truck.

The variety of the timber and its uses was interesting, particularly when one was reminded that it was taken from within the city limits. The wood was principally oak—white oak, red oak, yellow oak, pin oak, and black oak; but there was also hickory, sweet gum, poplar, and beech.

Staten Island shipbuilders took most of the output, and they were delighted with the quality of the white and red oak.

"The best oak that we have had in years!" one exclaimed.

It seems that oak from this vicinity, known as Jersey White Oak, stands in special favor with the shipbuilder. It commands a price \$20.00 per thousand feet higher than the southern oak, and he is willing to pay the difference. The lumbermen have a theory that the climate gives the wood a better quality, and they mention the salt air of the sea as a possible cause. At any rate, Jersey Oak has this prestige, and the Staten Island wood ranks with the best of the Jersey Oak.

From these woods came oak planking for the sides and decks of the ships; and lighter boards, sometimes rather shaky, which would do for the sheathing and dunnage. Heavy timbers were cut which would probably make the buffers along the sides of car floats or other scows, placed there to take the rubbing from tugs and docks. Some of the logs were sharply curved. Such crookedness did not detract from the value of the timber. The shipbuilder requires wood of that sort for fashioning the stern gunwales on tugs and other boats—"The more crooked, the better," declared one of the lumbermen. The only trouble here was that the portable mill could not handle logs with quite such curves as the boat builders would like to have. The saw was not large enough to trim the sides.

The oak planking was used for docks as well as ships. Likewise, the oak poles were sold to dock builders. A large number of the trees were too small for sawing into planks, but made good poles. Such poles are always in good demand, even when the market for other timber is poor. They are used in large numbers for piles, and they look rather picturesque when seen at the ferry slips.

Shorter poles of oak and hickory were sold to a Boston contractor for use as piling. When the pile has been driven pretty well down, a short pole is placed between it and the head of the driver to force it further.

The beech, hickory, tulip and sweet gum lumber from this operation was also sold to shipbuilders, but these woods might have gone to people who had special needs for them. The hickory might have gone to a manufacturer of tool handles, for instance, and the tulip to a maker of veneer. The beech might have been turned into dye paddles. It is said that not every wood can be employed for this purpose, for the juices of most kinds discolor the dyes used in the textile industry. Beech paddles are safe, however.

"There is a special purpose for practically every wood, and very little needs to be wasted nowadays," said one of the lumbermen. "We could even make use of the little locust trees along the road there. They could be cut into two by two pieces and sold to a maker of policemen's sticks. When dry, the wood of the locust is very tough and hard. It makes a fine nightstick."

Yes, even the sawdust might have been put to use. There are several companies in and around New York which make a business of nothing but sawdust. Sometimes it is shipped in from considerable distances, and sometimes it is manufactured expressly for a purpose. The uses range from the sprinkling of butchers' floors to the polishing of pearl buttons. The oak sawdust from the cuttings on Staten Island might have been sold at a good price to the furriers, who would use it for the tanning of fine furs, but it would have been necessary to keep the dust entirely free from bark.

With all the many and varied demands of the city for wood, from the building of docks and skyscrapers to the stuffing of dolls, as the climax of oddities comes this: From these same cuttings in the Borough of Richmond, a share of that high class oak planking was exported. Nor did this material go to the cut-over or devastated regions of Europe, but down to South America. Several thousand feet of 2-inch oak planking was shipped by one of the oil companies to Maracaibo, Venezuela, for the building of its docks.

And thus it may be recorded in some atlas of the antipodes that "in the boundaries of the City of New York there are forests which produce a variety of timber, including the best grade of oak. Local uses are supplied and a quantity is exported!"

NEW HAMPSHIRE MEETING

The Society for Protection of New Hampshire Forests will hold its annual meeting on September 2, 3 and 4, at Camp Allegro on Silver Lake, Madison, New Hampshire. Silver Lake is in the White Mountains and just east of Mt. Chocorua. The program of the meeting includes a number of important forestry questions, among them cooperation in the passage of the McNary-Woodruff Bill; forest and recreational reservations for New Hampshire; and state and federal cooperation under the Clarke-McNary Bill. Friday, September 4, will be given over entirely to excursions, the feature being a trip up Mt. Chocorua over the Piper Trail, under the leadership of the members of the Chocorua Mountain Club.

North *of the* Arctic Circle

By ALFRED M. BAILEY

LATE in the fall, when the winter snows have packed over the great expanse of rolling tundra, the sun pays but a few hours' visit each day, to cheer up the sombre stretch of prairie bordering the Arctic ocean in Northern Alaska. Then as the days glide by, "Old Sol" makes his visits shorter, until on the twentieth of November he fails to appear above the gray horizon—and the dark days of winter have come.

R. W. Hendee and I wintered at Wainwright, a little Eskimo village two hundred and fifty miles north of the Arctic circle, and within one hundred miles of Point Barrow, northernmost Alaska, collecting habitat groups for the Colorado Museum of Natural History. It was an interesting settlement of thirty igloos bordering the ocean. The rolling tundra country extended far back—one hundred miles and more to the unexplored Endicotts, where the flat horizon was broken with their unscaled peaks.

We found the Eskimos a congenial, kindly lot, and thoroughly honest. Our village was headed by Jim Allen, a white trader who had lived along that coast for twenty-five years. He was a veteran whaler and had gained the respect of the natives through his fair dealing with them. The Alaska Division of the Bureau of Education has established a school at Wainwright, so the children are able to speak English, and are well-fitted to meet changing conditions. I could not help but wonder at the progress made by the Eskimos in the last twenty years, for old government reports which we read during the dark days, always commented upon the difference between the Siberian and Alaskan natives,



UPIKSOM WATCHING A SEAL HOLE

and how superior the Siberians were to our Eskimos. Now the reverse is true, and there is no comparison between the half starved, unkempt natives we saw along the "west shore," and those of the Alaskan coast,

Hendee and I usually hunted with the Eskimos, and early in September made a whale boat trip down the coast sixty miles to Icy Cape, with Allen and a native crew. Black brant had been migrating for days, great strings of them flying close to the water, and far offshore; they were assembling in the broad lagoons back from the Cape before continuing their southward journey. We battled with adverse winds all the first day, tacking far out in the ice, and then shoreward again, but made little progress by nightfall. The wind increased in violence as dusk came, and by the time we had our tent

pitched upon an exposed sand spit, a half gale was blowing, with snow and drifting sand hurrying us to shelter. Camping with Eskimos is usually rather enjoyable, for they are great story tellers and delight in spinning yarns, but on this particular evening, we were all only too anxious to crawl into our deer skin sleeping bags.

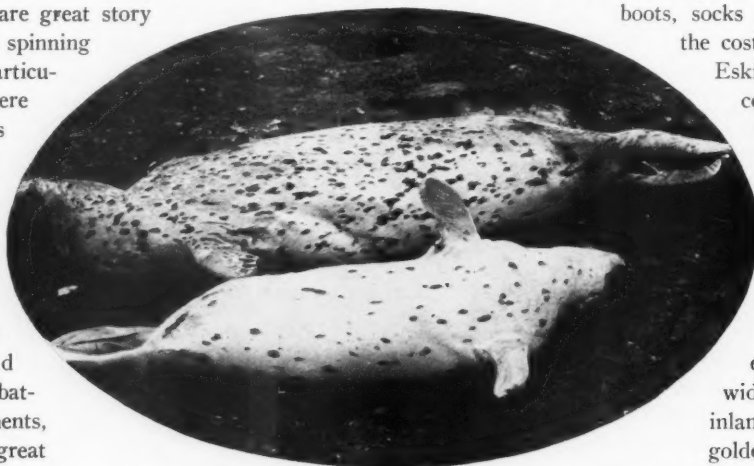
The Eskimos are well fitted for their life in the North. They are naturally quick witted and through centuries of battling with the elements, they have become great hunters. They live upon the country, of course, hunting whales, walrus, seals and birds on the ice in the spring and fall, and many go far inland in the summer to fish, and hunt caribou. The women are as skillful as the men, for they make all the clothing from reindeer and seal skins, using the back sinew of caribou for thread. The Eskimos dress entirely in furs in winter, wearing a light, shirt-like garment made from the summer skins of reindeer, with the hair next to the body; over this is pulled another artiga with the hair

worn outside, and over this is worn a snow-shirt of drilling. The latter is merely to keep out the driving snow, and to keep the furs clean. Fur pants, boots, socks and mittens complete the costume, and so clad, the Eskimo can travel in the coldest weather.

In the half light of the gray morning, we saw bands of scurrying wild fowl, all intent on making speed southward. Great bands of brant skirted the shore of the wide lagoon extending inland from our camp, golden plover drifted along the beaches, and glaucous gulls cruised by in a continuous chain. Far off shore were occasional

yellow-billed loons, and flocks of young arctic terns worked down the coast, each band of youngsters seemingly convoyed by one or two old birds.

As the wind was directly against us, we pulled our whaleboat across the narrow sand spit to the lagoon, and with a long line attached back from the bow, tracked our way southward. It was tedious work, but gave us more time to observe the life of the tundra. The snow



THE SPOTTED SEAL—AN IMPORTANT FACTOR IN THE ECONOMIC LIFE OF THE ALASKAN ESKIMO, FOR HIS CLOTHING IS MADE ALMOST ENTIRELY OF SEAL AND REINDEER SKINS.



A GROUP OF THE ESKIMOS AT WAINWRIGHT. WE FOUND THEM A CONGENIAL, KINDLY LOT OF PEOPLE AND THOROUGHLY HONEST. THE VILLAGE WAS HEADED BY JIM ALLEN, A WHITE TRADER, WHO HAD LIVED ALONG THAT COAST FOR TWENTY-FIVE YEARS.

of the evening before soon melted away, leaving exposed the dwarfed willows—trees six to eight inches in height, and the mosses and lichens covering the nigger heads. These arctic prairies seem devoid of life at the first glance, the vegetation is so scant and dwarfed, but every little tundra pool has its eider ducks, phalarope and sandpipers, and the large lagoons are dotted with ducks and geese. By noon we reached two abandoned igloos, called Milakatavik, and there we put up sail, as the wind had shifted, and made good headway up the broad lagoon.

Camp was made that night near a great pile of drift wood, the only accumulation of any size I saw along the arctic coast. This drift had to work through the ice from the Mackenzie far to the eastward of Barrow, or from the Noatak, Kobuk and Yukon rivers hundreds of miles south. I have often wondered how such quantities of wood could work through the narrow passes from the ocean to the lagoon, and be deposited there. Great spruce forests stretch along the Kobuk and Noatak rivers, which are well beyond the arctic circle, but these forests are limited strictly to the river valleys. When travelling down coast by dog sled in the late winter, I saw these timber belts from the distance, and they looked like great



PACKING ACROSS TUNDRA COUNTRY, FAR INLAND. NEAR WAINWRIGHT THERE WERE NO WILLOWS MORE THAN A FEW INCHES IN HEIGHT, BUT HERE THE TREES OFTEN ATTAIN A HEIGHT OF SIX OR SEVEN FEET ALONG PROTECTED RIVER BANKS, SHRINKING DOWN TO A FEW INCHES IN HEIGHT ON THE EXPOSED TUNDRA.

blue shadows, cast by passing clouds upon the glistening, rolling expanse of white. Where the north winds have a clear sweep, the trees are dwarfed. Near Wainwright, there were no willows more than a few inches in height, but inland some fifty miles, they were often six or seven feet tall along protected river banks, while only a few feet away, on the exposed tundra, they were forced to crawl beneath the mosses.

We reached Icy Cape the next evening. It was a small village used mostly as a winter base, the majority of the natives being inland with the reindeer herds, or shooting brant. We ran back to the broad lagoon and pitched camp near that of Sagalook, a native hunter, on a point euphoniously called Tagoeuknisuk (meaning "not very salty"). Black brant were congregated in the vicinity by thousands, and the roar of black powder shells could be heard in the late evening as the Eskimos shot into the massed flocks. A great many birds were killed by each family, but as they were killed for food, one could hardly censure the Eskimos.

The natives had a small round tent for their summer camp with racks upon which to hang their game. The birds were simply placed in pairs



Harry C. Bloomfield

THE REINDEER ARE NOT NATIVE TO NORTH AMERICA, BUT WERE INTRODUCED IN THE '90's FROM SIBERIA, AND ALTHOUGH ONLY A FEW HUNDRED HEAD WERE BROUGHT OVER, THEY HAVE INCREASED ENORMOUSLY AND ARE A GREAT ASSET TO THE ESKIMOS.



SNUG AND WARM IN HIS FUR GARMENTS, THIS IS A
REAL SNOW BABY, FAT AND HAPPY.

over poles, without being cleaned, and none seemed to spoil. Upon the brown hillsides were many reindeer, all still in the velvet, their great antlers resembling a dense willow thicket, when the herds were massed. Mammal life was rather scarce in the vicinity of our camp, although we saw many of the beautiful spotted seals in the lagoon, and ground squirrels and lemming were numerous upon the tundra. One of the girls at the native camp had a pet polar bear.

Polar bears are not common along the arctic coast, as they are almost strictly a marine animal, living far offshore on the "old ice," as the great permanent ice field is known. When onshore winds blow, with fields of massed ice encroaching on the shore, then old "Nannuk" is likely to be seen. He is often found in droves under such conditions, especially if any whales, or walrus carcasses are stranded along the beach. A couple years ago, old Kogmuk, one of our crew, came upon a dead walrus and killed eleven polar bears while several others escaped. These animals are not ordinarily dangerous, but a wounded one is apt to give the hunter an interesting experience. Bear were not common during our year in the North, although we secured all the specimens needed for museum groups.

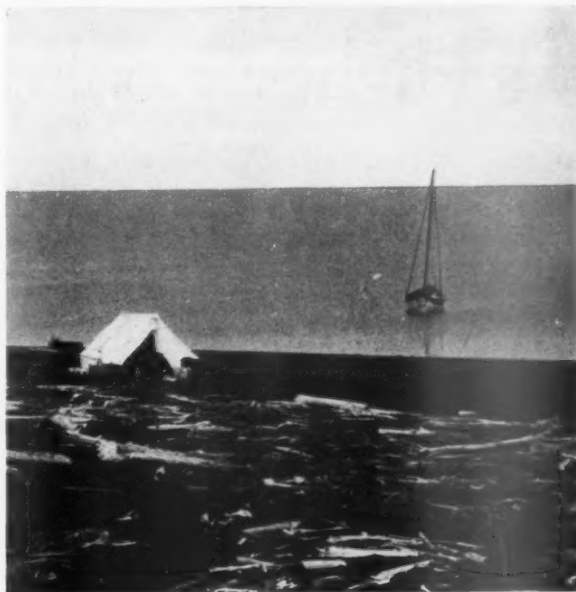
Late in October, Hendee went far inland toward the Endicotts, with old Kogmuk, to hunt the rare barren ground caribou. These mammals had been practically exterminated along the arctic coast, but now they seem to be increasing slightly. Hendee and Kogmuk had a team of seven dogs, and loaded their sled with the bare essentials for themselves, and all the food they could carry for their dogs. Dog food is the big problem of arctic travel and all plans must be made after taking this into consideration. They were to work far up Wainwright Inlet, and then back into the treeless, barren country toward the mountain ranges; they were gone for twenty-five days, collected a fine series of caribou, and upon their return, each had a mutual respect for the prowess of the other. When they left on their hunt, Kogmuk could speak no English and Hendee could not understand Eskimo, but on their return, they could converse fluently.

The caribou is larger than the domesticated reindeer and occasional wild animals join the tame herds; the herders do not allow the bulls to stay with the reindeer however, as these animals often lead away a great number of their stock. The reindeer are not native to North America, but were introduced in the '90s from Siberia. Although only a few hundred head were brought over,



TWO INDUSTRIOUS NATIVE WOMEN, BUSILY ENGAGED IN
SPLITTING WALRUS SKINS

they found conditions so suitable they have increased enormously, and now each village has its herd and most of the Eskimos are deer owners. There are too few reindeer, however, for the natives to live upon their herds, and the time has not yet arrived when they can turn from their hunting to a pastoral life. The deer are kept in charge of herders who drive them from place to place, according to the food supply. The "reindeer moss" upon which they feed has been depleted along the coast and the herders have to take the deer far inland. In the late fall, the herds were assembled near the village for counting and marking; the natives cut ice from the lagoons in great slabs, which were upended to form a corral, and the reindeer to be counted and ear-marked were driven through this unique pen. Each owner has his mark so he can tell from year to year his increase in wealth; in the 1921 count it was found that approximately 1400 head had escaped from the three herds, those of Wainwright, Icy Cape and Atanik.



OUR SECOND CAMP, AT THE DRIFT, ON THE WAY TO ICY CAPE. THIS WAS THE ONLY PLACE WE FOUND DRIFT WOOD, IN ANY ACCUMULATION, ALONG THE COAST.

Then in the fall, when onshore winds prevail, great herds of walrus and seals appear with drifting pack ice, and there is great excitement in the native village. A constant watch is kept for game from the caches and house tops, and the natives sail far offshore on their hunting excursions. The walrus migrate northward through Bering Strait into the Arctic Ocean each spring, sojourn for a few brief weeks in the arctic with their young and then return with the southward drifting pack into Bering Sea in the fall. At times great numbers of them congregate on the ice pans, being massed black upon the drifting floes. They are not wary, and unless they get the hunters' scent, will allow them to approach within a few feet, and often a concealed marksman will kill the entire herd. They are extremely difficult to kill outright, however, and many wounded animals escape, to die miserably later, as is attested by the stranded carcasses one sees along the sandy beaches. (Photographs by the author.)

(To be Concluded in the Next Issue.)

WHOO'S WHOO?

By T. Clinton Brockway

"Whoo, whoo, whoo's whoo?"
Said the great horned owl.
His clear voice rang
As loud as the clang
Of the bell in the steeple.
All the woods people
Were hushed when they heard
The questioning word
Of the terrible bird,
Asking, "Whoo's whoo?"
The weasel and rabbit and mink
Didn't dare even wink,
But froze where they stood,
In the dark of the wood.
The squirrel in his tree,
Waking up, did not speak,
No, not he.
Not even a squeak
From the little wood mouse,
In his little wood house
In the heart of a log.
The muskrat, out in the bog,



Made a dive for his den;
For well he knew when
The great horned owl is about
He had better watch out.
The crow, asleep on its perch,
The hawk on her nest
In the top of a birch,
The partridge, and all of the rest
Of the birds of the wood,
They are food
For the great horned owl.
So silence spread like a pall;
And fear in the hearts of them all.
Not a voice of a beast or a bird
To answer the question they heard,
Asking, "Whoo's whoo?"
But an echo that lived in a cave
In the rocks, he was brave.
He alone of them all
Dared respond to the call.
When the great horned owl
Cried, "Whoo's whoo?"
The echo replied, "Yoo's whoo."

Uncle Sam's Highest Lookout Tower

BY EDWARD P. ANCONA

STANDING GUARD over one of the world's largest pine forests is the recently completed Promontory Butte Tower on the Sitgreaves National Forest in Eastern Arizona. Besides being a fire lookout of great importance, this new steel tower is the highest tower yet built by the Forest Service on any of the National Forests. This graceful web of symmetrical steel angles, braces and guys set in heavy concrete piers, rises one hundred and twenty feet to the top of the crow's nest, where the lookout man is in the clear above the heavy pine forest stretching away on three sides. The erection of this tower was no mean feat for the crew of five Forest Service men who, although hampered by high winds part of the time, completed the work above the piers in twenty working days. During this time, they also wrecked and cleared the ground of the tall wooden tower that had served as a lookout for twelve years and had been condemned as unsafe. While the concrete piers were setting, the crew also built a substantial cabin near the tower base for the use of the man assigned, during the fire season, to this sky-scraper among lookout towers.

While hardly to be classed as an engineering feat, nevertheless the erection of this tower in a remote forest region, by men who take as a matter of course any task from the riding of a bucking bronco to making a public address on forest fire prevention, is a tribute to the rough and ready skill of Uncle Sam's forest ranger. The tower had to be especially designed by a large manufacturer of forest fire equipment since the specifications called for a structure just double the size of the highest tower regularly carried in stock. Ordered more than a year before it was fabricated in Chicago, where the pieces were assembled, marked, and then taken down for shipment. Arriving in Arizona, it was transported

by wagons a few hundred pounds at a load, over mountain roads to Promontory Butte, sixty miles from the railroad. After a year of preliminary work and waiting, the material was finally on the ground, after which it was only a matter of days until the glassed-in crow's nest was reflecting the sun's rays above the tops of the pines on the Colorado plateau.

From this high vantage, the fire lookout man now has a clear view of the vast sea of pine forests stretching miles to the East, more miles to the West; and North to the merging of timber with the grass lands of Northern Arizona; south over the fearsome breaks of the great fault which marks the south rim of the Colorado Plateau to the meeting of pine and cactus at the edge of the great desert. Under his watchful eye is an empire of pine more than three hundred miles long by twenty to fifty miles wide. To this dry Southwest, the

economic importance of this great body of timber from the standpoint of water conservation, wood supply, local lumbering industries and regulated grazing of live stock cannot be estimated. Promontory Butte, with other lookout points east and west, is one of the main guardians against the invasion of this heritage of the centuries by the arch-enemy—*forest fire*.

Between the periods when his eye searches all in its range for the tell-tale smoke, the lookout man, if he is possessed with a love of the life and color of the Southwestern mountains, can let his eye and mind roam far. Plainly visible to the northwest, more than a hundred miles distant, he can easily discern the snow-capped peaks of the San Francisco Mountains of the Coconino Forest. Swinging to the east his eye may sweep the buttes and fantastic topography of the Painted Desert—softened by the great distance until a tiny furrow seems to mark the course of



THIS IS THE HIGHEST LOOKOUT TOWER ON ANY OF UNCLE SAM'S GREAT NATIONAL WOODLOTS. IT IS LOCATED ON THE SITGREAVES FOREST, IN ARIZONA, AND IS KNOWN AS THE PROMONTORY BUTTE TOWER.

the Little Colorado, hastening to join the Grand Canyon, invisible behind the Frisco Peaks. To the East the green slopes of the White Mountains in the Apache Forest, and to the south, almost beneath the tower, the thousand foot drop of the Mogollan Rim can be traced for miles through the pines. Further south, the vast desert marks a great inland grazing region on the Tonto Forest, held largely to regulate grazing on the watersheds of the Roosevelt Dam. To the west, the mountains beyond the Verde River, forming the west boundary of the Prescott Forest, stand up against the horizon. On all sides, between the mountains, through the gaps, and across the mesa tops are glimpses in faint outline, and beyond are more peaks, other buttes, and other mesas low down on the horizon. How far does the look-out's eye travel on clear days when he swings his glass in a circle over the domain beneath his cupola? Who can say?

If the look-out man, on the contrary, has a bent for local history, he can muse on the sights the passing of years brought to the country beneath his



THE OLD WOODEN TOWER ON THE SITGREAVES, WHICH WAS DEMOLISHED TO MAKE WAY FOR THE NEW STRUCTURE OF STEEL.

view. In the days before the time of the whites, by here went the bands of fierce Apaches and other migratory tribes traveling from the South to foray on the peaceful Pueblos of the North-Hopi, Zuni and others, among them the many cliff and mesa pueblos that are today nameless rock piles thickly strewn with broken pottery. Later there passed near here one day a new and strange sight, men on animals never before seen on this continent, men with skins that were white instead of red, men in glistening armour—the little party of the Spanish explorer Onate on his way to and from the discovery of the Gulf of California.

More of these newcomers passed in the succeeding years—soldiers, priests, explorers, conquerors, missionaries—to discover the Grand Canyon, to conquer, to Christianize, to visit the far-off Hopi villages. Then more than two hundred years later came new white men, gold seekers, hardy scouts and frontiersmen, the first ripple of the engulfing wave

that was to sweep in from the East by way of the Santa Fe trail. Followed immigrants, soldiers and at

(Continued on Page 560)



A CLOSE-UP OF SOME OF THE SPLENDID PINE FORESTS OVER WHICH UNCLE SAM'S FIRE LOOKOUT MUST KEEP A CAREFUL WATCH. FROM HIS HIGH VANTAGE POINT ON PROMONTORY BUTTE, HE LOOKS DOWN UPON A VAST SEA OF GREEN FORESTS, STRETCHING AWAY FOR MILES TO THE NORTH, SOUTH, EAST AND WEST.

"Spud"

The Hold-up Bear of the Yellowstone

By ALBERT C. ALLEN

SPUUD was in a bad way, there was no question of that. Winter was not far distant and something *had* to be done, and that immediately. Cut off from her regular source of supplies, it behooved her to get busy and find another if she would live through the long months of snow, cold and famine. Nature had provided her with ample protection in the way of furs to keep out the cold, but, without a thick layer of fat for nourishment, this provision could not save her. Besides, fur was only an insulation and the heat must of necessity be furnished from inside. So it was vital that she get busy.

Spud was a two-year-old black bear. In the spring she had emerged from her long winter's hibernation thin and hungry. The snow had not yet disappeared from the ground when she worked her way out of the den. Food was scarce, but she managed to subsist on the spring grasses, roots, grubs and small rodents she could dig out of their burrows. Hers was not a fastidious appetite and she eagerly devoured almost anything she could chew.

As summer came on food became more plentiful and the advent of the tourist season in Yellowstone Park found Spud established in the woods back of Old Faithful Hotel. At first she took delight in pawing over the garbage on the dump and she camped close to it. She learned the time when the lumbering cart deposited its (to her) savory contents and at the first rattle of its approach she moved out of the fringe of trees and sat, licking her chops, in hungry anticipation.

But other bears were there, too, and Spud soon found it difficult to obtain an undisputed morsel from the heap. She was not very large and her courage was smaller than her size. On several occasions she had been badly worsted in encounters over the garbage heap. Once she had cuffed the ears of a too insistent cub who had persisted in trying to get a taste of the syrup from a can which Spud was licking. The cub had instantly set up loud squeals and Mother Cinnamon had descended in a whirlwind of wrath upon Spud, who fled at top speed for a nearby tree. She made the tree all right but, just as she was drawing herself up to safety, Mother Cinnamon reached for her and her sharp claws tore a wide red gash in Spud's hide, just on the hip.

From then on Spud was chased into the brush by the vengeful mother whenever she attempted to snatch a morsel from the dump. Other bears followed the old Cinnamon's lead and Spud had a very trying time of it.



HARRIED BY MAN AND BEAST, LIFE BECAME TOO STRENUOUS FOR SPUD. SHE DECIDED TO CHANGE HER BASE OF OPERATIONS AND SO CAME BY DEGREES OVER THE CONTINENTAL DIVIDE.

In fact, life became so strenuous for her that she was forced to give up all attempts at feeding from the dump except when the others were not present—and then there was nothing much left.

For a day or two she sat at a safe distance and watched the other bears feeding; then an idea filtered into the small brain behind the little beady eyes. When the cart next appeared, Spud rambled out and met it. As the contents were dumped she instantly piled into the mess and filled her mouth with dainty morsels. In this manner she was enabled to get a few mouthfuls before the cart left and she was driven away. This scheme worked to perfection till one day she got in the way of the driver and upset a bucket of sticky garbage over his foot. In the wrath which followed Spud received a stunning blow over the head with a heavy galvanized bucket and hurriedly left the spot, followed by a volley of tin cans and oaths. So Spud was again without a meal ticket, as she was not permitted to go near the cart.

Wandering down near the big hotel, she was sighted by a group of campers from "Nebraska." They had just entered the park and had never seen a bear. It mattered not to them that Spud was a very insignificant member of *Ursus Americanus*—she was a bear. Pa, Ma, and all the little Nebraskans shrieked with delight

and Spud was at once surrounded, while sister "Samanthy" maneuvered to "git his pitcher." At first Spud was inclined to run, but Pa tossed her a "hunk o' bread" and she paused to eat it. Ma, of course, wanted to feed the "bar" and, as soon as the kids found it could be safely done, Spud reaped a harvest. So Spud found a new source of profitable endeavor. She hung about the camps and had "her pitcher took" by tenderfeet, and wheedled tidbits from the old-timers by her very tameness. But her appetite was prodigious, and these feedings did not by any means satisfy her. Her sensitive nostrils told her that there was more, much more, where this all came from and she began to try schemes to come at the real source of supply. From camp to camp she ambled, and one day her opportunity came.

Another Pa and Ma had just come in and made camp. Ma had just finished putting a savory supper on the table when someone called out: "Old Faithful is going to play!" Pa dropped the tin basin he was going to wash in and, grabbing Ma's hand, rushed over to where they could get a good view of the spouting geyser.

It happened that Spud came along just at the psychological moment. Geysers did not interest her in the least, but the delicious odor of fried bacon did. She followed the scent to Ma's table. Here was indeed a feast for the gods, to say nothing of a hungry bear, so Spud wasted no time in idle speculation. When Pa and Ma returned, a few minutes later, Ma shrieked in horror at what she saw. Spud sat beside the overturned table in a jumble of dishes and food chewing contentedly and lapping eagerly at her jam-bedaubed paws. Other tourists came to the rescue and an immediate onslaught was made upon the complacent Spud. Chunks of wood began to fly in her direction and, realizing that she was really the center of the rumpus, she beat a hasty retreat, pausing only long enough to snatch a slab of bacon.

Her thievery soon became so well known that she was continually clouted out of camp, and picking was getting pretty thin. The climax came when she sauntered down, one evening, to the "cook tent" of some of the park employees. Mike, a red-headed son of Erin, ruled that domicile. Mike was an old-timer in the park and he

hated bears with all his Irish heart—hated them for the trouble they had so often made him. Spud sensed this and had heretofore given the cook tent a wide berth. But today she happened to stroll by and did not get the whiff which usually warned her of Mike's presence. She paused, looked with beady eyes upon the tent as she rocked back and forth. Seeing no one about, she cautiously approached and found the tent empty. Entering, a delicious odor of fresh bread greeted her nostrils, and she stood upon her hind feet the better to see upon the table. Sure enough, there were rows of savory brown loaves resting on the bread board. Eagerly she reached out her paw and raked the crisp loaves upon the ground. She ripped them apart and sank her white teeth into a loaf but, with a little squeal, she dropped it as the hot bread burned her tongue and nose. Not quite understanding it, she tried again, but again the strange thing "bit" her, and she abandoned it.

Over in the corner she found a couple of sacks that smelled good. She ripped them open and revelled in the white deluge of flour. But this was dry, so she dipped her paws deep into a keg of butter. She was busy with this when a sound attracted her attention. She stood

upon her hind legs, head and shoulders plastered white with flour and golden butter hanging to her paws, and saw Mike standing paralyzed with wrath in the open door. With a roar of anger, he grabbed the first thing at hand, a wooden water bucket, and rushed at Spud. She didn't wait, but with an audible whiff charged under a table and dashed for the door. The table went over with a crash of breaking dishes and, as she passed the furious Irishman, he struck with all his strength, the wooden



SPUD'S METHOD NEVER FAILED—AND ALL CARS WERE GRIST TO THE MILL OF HER VORACIOUS APPETITE. APPROACHING ON ALL FOURS, SHE WOULD RISE TO HER HIND FEET, PUT HER FRONT PAWS ON THE RUNNING BOARD OR FENDER AND ALL BUT DEMAND FOOD—A DEMAND THE DELIGHTED MOTORIST SELDOM FAILED TO MEET

bucket smashing to bits over the bear's head. It was a vicious blow and staggered Spud, which gave Mike time to get another weapon, and he was instantly upon her heels with an ax handle. Leaping high in the air, he came down with all his strength on the hind quarters of the fleeing bear, and had it not been for her long hair it would have fared ill with Spud. With the blow Mike let out a yell like an Indian. Spud leaped forward, but the frenzied Irishman was hot on her trail. With every leap he emitted a blood-curdling yell and came down

with his club. Spud saw she couldn't get away, so she made for a nearby spruce, and up she went, leaving the frenzied Mike dancing in impotent rage at the base of the tree.

After this Spud was a marked bear. Everyone was warned to watch out for the little thieving black bear with the scar on her right hip. Everybody clouted her, the bears drove her from the garbage dump and she was in a bad way.

One night she came across a motor camp down near the stream. It was bright moonlight, and she quietly made her way into the camp. The campers, understanding the ways of bears, had placed their food in a box at the head of their bed, so that the slightest attempt to remove any of its contents would be instantly detected.

Spud investigated the car. There was a faint smell of food there. She climbed in and dropped into the tonneau. Yes, there, on the upholstery, was the smell. Not knowing that it was merely the odor left from where the sticky fingers of kiddies had been wiped on the leather, she thought candy was inside, and with her sharp claws ripped open the cushions and investigated. Down behind a seat cushion she found a piece of candy. She ate it, and thus encouraged, continued her search. All the upholstery was ripped out and the pockets on the doors torn open. Finding no more in the tonneau, she climbed to the front seat and tore out the upholstery there.

The camper heard the noise, looked up and saw the bear sitting in the front seat, her paws on the steering wheel. Without stopping to think, he jumped up and with a loud yell rushed toward the car. Spud, knowing what was coming, considered not the order of her going, but went. Straight through the windshield she leaped with a crash of splintering glass and a ripping of cloth as she took the frame with her. Of course, the frame was fastened to the top and the top went, too, and Spud "beat it," leaving only a sorry wreck behind.

Thus harried by man and beast she realized she would have to change her base, so she made her way slowly up and over the Continental Divide toward the waters of Yellowstone Lake. A few miles before she reached the Thumb she stopped to rest beside the road and, as she sat there, a car came by. The occupants saw the bear on the bank and stopped. Cameras came out and Spud once more was fed while she had her picture taken. The car left and she continued to amble down the road. An-

other motor approached and Spud stood upon her hind legs to look. The motor drew up and stopped. Again the cameras and more food.

When the car left, Spud was busy licking up the crumbs from the ground. Later another car came, but passed her by. For some time she waited and was about to leave when she again heard the purr of a motor. She stood up in the road, her ears pricked forward, watching for the car to appear from behind the bend. With a squeak of brakes, the car came to a stop and Spud, dropping to all fours, made her way to the side and placed her two paws on the running-board. As she plainly wanted food, the remnants of lunch, some crackers, candy and chewing gum were fed to her.

Car after car passed, and most of them stopped and fed the little black bear. She seemed to know that she was in possession of a strategic point and she held it. She had to leave occasionally to get water, but always came back to the exact spot and sat upon the grassy bank waiting the coming of the cars. At this point all cars came from one direction, and she soon learned which way to look for them. Also, she found that if she merely sat upon the bank they were very likely to pass her by.

During the waits between times she dozed upon the bank, but as the purr of a motor reached her ears she waddled down into the center of the road and stood upon her hind legs as if to cry, "Stop!" She seemed to realize that they would not stop unless she sat up on her hind legs, so she never dropped upon all fours till the car had come to a halt.

Day after day she repeated this performance, and always at the same spot. Her fame spread over the park and the tourists were all looking out for the "Hold-up Bear" near the Thumb of the lake. At first she had trouble making the big yellow coaches of the transportation company halt, and she soon learned not to stand in the middle of the road when they came by—they might not stop.

And so the fame of the "Hold-up Bear" spread. At Mammoth, the Canyon, the Lake, or wherever one went, the story of the "Hold-up Bear" had spread and everyone was on the lookout and prepared to pay toll to the little bandit bear near the Thumb. Thus she plied her nefarious trade and waxed fat, and few recognized in the famous "Hold-up Bear" Spud, the little thief of Old Faithful.





The Lagoons Are Flanked with Exotic Plants Chosen for Their Rare Beauty, in Brilliant Contrast to the Giant Cypress, Ghostly in its Shroud of Hanging Mosses

Magnolia Gardens

"The Most Beautiful Spot in the World"

BY HENRY F. CHURCH

(Photographs by Dr. R. S. MacElwee)

OLD, as a garden, when in 1780 the guns of the British thundered in Charleston Harbor, Magnolia-on-the-Ashley during its span of two hundred and twenty-five years, has twice passed through the devastation of war and flame, losing by fire a stately mansion in each of the wars of the Revolution and the Rebellion.

Once a West Indian twister, wandering in from its ocean pathway, swooped down on the magnificent grove of magnolias from which the estate took its name and wiped out in a moment the work of centuries.

Yet despite its decimation by man and nature, the heritage of beauty has remained in old South Carolina with this most famous of show places.

Its grandeur as an estate has gone, for of the 1,874 acres that made up the original plantation, only twenty-four now remain to the garden proper; but with the dwindling of its acreage has come a growing glory that has given it definite place as the world's most beautiful spot.

Lest this statement seem strong, the reader is referred to no less authorities than John Galsworthy and Owen Wister, the one a famous painter of famous gardens, the other a



The Moss-hung Approach
Road to the Gardens

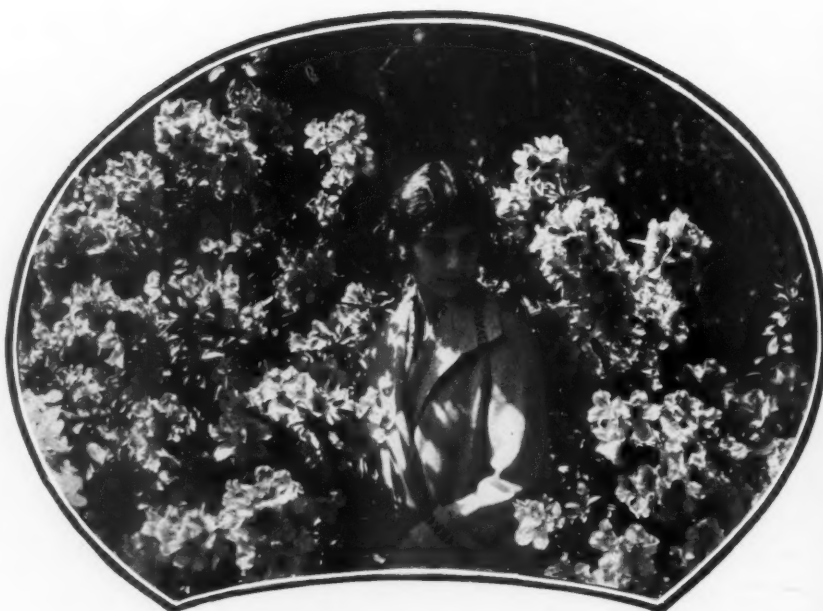
master of descriptive phrase. To write on this subject without quoting from the glowing word-pictures of Magnolia Gardens given in their respective books, "The Hedonist" and "Lady Baltimore," would be unorthodox. Surely, since the days of Constance Fenimore Woolson, whose articles on the Gardens antedate those of the gentlemen named, no one has written of Drayton's horticultural masterpiece without quoting Galsworthy's ecstatic statement: "This is the most beautiful spot in the world!" or the more conservative, yet equally enthusiastic declaration of Wister that "no horti-

culture that I have seen devised by the hand of mortal man approaches the unearthly enchantment of the azaleas."

Although generation after generation of nature loving occupants had fostered the natural beauty of Magnolia-on-the-Ashley, it remained for a physician's verdict, granting life to one John Grimke Drayton, on condition that he spend his days in the open air, to decisively change the destiny of this vast plantation and lay the foundation for a garden which, to again take Galsworthy as authority, exceeds in beauty the Baboli at Florence, the Cinnamon Gardens at Colombo, Concepcion at Malaga, Versailles, Hampton Court, or the Generalife at Granada.

Men suddenly confronted with the number of their days do strange things to commemorate their final span. History is replete with the chronicles of those who in their closing days have erected hospitals and cathedrals, endowed colleges, and provided libraries as monuments. The Rev. John Drayton, calm in the face of his sentence, took stock of the material at hand and builded him a garden.

And such a garden! Possessed of rare feeling and exquisite taste, a man of vision, he pictured a garden built on lines so heroic as to dwarf any previous efforts made by man, yet so finely schemed as to possess not one discordant note.



The Azaleas Are at Their Best About
the Middle of April



Climbing Yellow Roses, Wisteria and Spanish Moss Share
Alike the Limbs of the Live-Oaks

History tells us that the Reverend Drayton began his task by planting two rose bushes, one red, the other white, and that later, through the insistence of Pennsylvania friends, he was induced to try out some "settings" of an oriental plant, *azalea indica*, after repeated failure to grow the plant had been met with in Philadelphia.

In the face of his completed efforts, it seems improbable that the advent of Mr. Drayton as a gardener could take on so modest an aspect. Rose bushes trained to trellis! Not for the jovian hand of John Grimke Drayton. True, there are many roses at Magnolia Gardens, but of these, the outstanding are climbing yellow ones that scorn the aid of man-made trellis; rather do they elect to go swarming up a natural frame work formed of living trees to vie with the adventure-some wisteria for height attained.

Live-oaks, festooned with gossamer strands of Spanish moss, are a common sight in the low coastal country of South Carolina. Horlick calls the union, "Affinity of oak and moss, a plighted troth unbroken," but the oaks of Magnolia are fickle for the wisteria and climbing rose share likewise the friendly limbs of these sturdy trees.

The glory of Magnolia is its wealth of azaleas; its strength of beauty lies in its trees. Vast green bulwarks, against which the vivid sea of color surges during the flowering season, the trees are constant, the azalea blossoms are gone with the end of April.

It is easy to imagine that the author of this garden got his inspiration from these trees of his, and that the planting of the azaleas, the camellia japonicas, and the other flowers were incidental—flaming guides skillfully placed to draw the eye from color to color down some wooded vista to where stands a giant cypress, ghostly in its shroud of hanging mosses.

At any rate, the reverend gentleman chose from his ancestral estate sixteen acres of the most picturesque portion of his lands. Here, with an innate artistry beyond the skill or daring of the professional landscape gardener, he dug lagoons, flanking their cool, dark waters with exotic plants chosen for their riotous beauty. Azaleas, running the gamut from pale pink to deepest crimson; white azaleas and salmon; camellia japonicas reaching half as high again as the twenty foot azaleas, and with dark green foliage aglow with flowers, mottled, red and white; rhododendrons, amid a golden blaze of banksias; the trailing glory of wisteria; the pleas-



Magnolia Walkway---Dark Green
Foliage Aglow with Flowers

ant chrome of climbing rose—these he planted against a background of carefully selected trees. Cypress trees, maple trees, live-oak, cedar, pine, dogwood, redwood, syringa and jessamine, with ever the thought that the flowers were transient, the trees the permanent frame work of the picture.

It is variously estimated that with the addition of the eight acres of adjacent woodland now being prepared and planted, upward of 100,000 plants will be found at Magnolia Gardens. One of the colored guides, questioned on this point, replied in the quaint Gullah patois of the sea island negro: "Effen yo' all counts in de violets, it would be mo' lak' a hundred millions." And by no means should the violets and other humble flowers be overlooked. The spreading lawns, the green avenues of the vistas, are carpeted with myriads of violets; wood violets, purple and blue, and here and there, a cluster of the more coy white

ones, swarm down to the very edge of the mirroring lagoons, in restful contrast to the flare-like splendor of the azaleas and their compatriots.

The azaleas are at their best about the middle of April, although they are beautiful from the end of March throughout the following month.

The camellia japonicas, of which there are to be found more than a hundred varieties, add the only formal note to the Gardens. Shooting upwards to thirty feet, these tree-flowers bloom from early February to about the middle of March, but often a late season holds them well into April.

The *Magnolia grandiflora*, for which the Gardens were named, bloom last of all, as if too proud to mingle with the interlopers that have robbed them of their birthright. Proud Southern beauties, these; they hold the center of the picture long after the last azalea petal has fallen.

Mr. C. Norwood Hastie, the present owner, is a lineal descendant of John Grimke Drayton and inherits the garden-building skill of his noted forbear. Under the direction of Mr. Hastie eight additional acres of woodland, equally as picturesque as those which served the elder Drayton as a setting for the original garden, are being cleared up and laid out as an adjunct to the present tract. Nurseries, under the skilled care of the negro gardeners of the estate, are turning out sturdy young plants for transplanting when the clearing will have been accomplished.



Flaming Azaleas Border the Pathways
with Riotous Bloom

To the layman the enormous amount of work necessary to the keeping up of so elaborate a garden estate is not always evident. Throughout the year nearly two score of negro workers are kept busy on the garden work alone and during "the season," many other darkies are employed as guides.

No labor trouble is found at Magnolia. The hearts of these humble helpers are as deep-rooted to the place as are the plants they so skillfully coax to a maximum of bloom.



The Glory of Magnolia Gardens Lies in its Wealth of Bloom---
Its Strength of Beauty Lies in its Trees

Magnolia has produced in its "gyardners," as they pridefully term themselves, a breed of caretakers peculiar to itself. Wars, devastations, sometimes poverty, and the lure of the present-day wage in the No'th have failed to divert the purpose of these colored helpers in their task of making Magnolia Gardens "the most beautiful spot in the world."

The tourists who flock in thousands to this show place, come and go with the coming and the going of the flowers; the work of Uncle John, the "haid gyardner," and his dusky legion knows no season. Long after the drone of the bees and the comment of the visitors have died away, the musical chanting of these "hands" is heard as they go about the endless routine of garden making.

The half-barbaric snatches of song led by the inevitable "chantry man," the sounds of ax to tree as new vistas are hewn, and the underbrush is cleared against the coming of flowers as yet unplanted; the pungent smell of wood smoke,—coming suddenly upon these things, one, visiting Magnolia out of season, is suddenly gripped with the feeling that the spirit of John Grimke Drayton again walks abroad urging his dusky minions to the completion of the most gorgeous dream-picture ever devised by mortal man.



EDITORIAL

The Stockmen and the National Forests

THE attack of western stockmen upon the administration of grazing in the National Forests promises to be one of the most important controversies in the conservation field this winter. Issues are involved which may affect very vitally the whole system of National Forests, and the situation is one which demands that friends of conservation be much on guard. Great public interests are involved. The most immediate and tangible issue at the moment is approximately three million dollars of annual receipts from the National Forests. This sum represents the difference between the grazing rates demanded by the stockmen and those which the Service believes represent a fair value of forage in the National Forests.

The whole controversy appears to have been precipitated by the proposal of the Forest Service to appraise its forage crop on the basis of its market value in somewhat the same way that timber is appraised and sold. The present fees charged the stockmen, according to the Forest Service, are on the average about fifty per cent less than prices which owners of comparable range lands are receiving. Taking into consideration the fair value of the National Forest forage and the somewhat higher cost of handling stock in the Forests, the Service therefore proposed an increase of grazing fees amounting to approximately seventy-five per cent more than those now in effect.

When this proposal was announced, the stockmen countered with the charge that the Forest Service was changing its basis of determining grazing fees. They held that from the beginning the principle has been to base the fee upon the cost of administration, and they are demanding that a readjustment must be on that basis. In view of the fact that the revenue from grazing at the present time is approximately three times the cost of administration, their demand would mean a reduction of present fees amounting to approximately sixty-five per cent.

Other issues are involved. A full statement of the controversy is given on another page in this issue. We believe that the contention of the stockmen that grazing

fees on the National Forests should represent the cost of administration is unjustified by any precedent or principle, and that to concede to this demand in the case of grazing would speedily break down the present system of administering other commercial resources of the National Forests. There is no more reason to give a special class of stockmen forage at cost than to give a special class of lumbermen timber at cost, when both groups commercialize the product to their own gain. The National Forests are public property belonging to the whole people, and if a few favored groups dealing commercially in natural resources are to be made special beneficiaries, dismemberment of the whole system would follow.

Another definite proposal of the stockmen that Congress create a Board of Appeals with authority to overrule the Secretary of Agriculture in his decisions relating to grazing is likewise fraught with great danger. The primary purpose of the National Forests is timber growth and watershed protection. Grazing and forestation do not always mix, and in carrying out the primary purposes of the Forests it is often necessary to restrict or even exclude grazing on certain areas. A Board with authority to overrule the Secretary in controversies involving grazing interests on one hand and forest interests on the other would defeat the very purposes for which the National Forests stand.

More dangerous than the proposals already mentioned is the contention of some of the stockmen that Congress should pass an act giving them a prescriptive right to grazing lands in the National Forests based upon past use. Such a right would make some ninety million acres of land now used for grazing on the National Forests subservient to that industry, and would virtually set aside the dominant purpose for which those Forests were created by President Roosevelt and his predecessors.

We believe that the stockmen should be accorded the same fair treatment in the commercial utilization of forage on the National Forests as users of other Forest products, but there are no valid grounds for giving them special privileges not accorded other users.

Wanted—10,000 Boy Scout Forests

THERE is in the making at Madison, Wisconsin, a forest which embodies a great idea. It is that of a real Boy Scout forest—one which the Scouts may call their own, and in which they may freely practice their woodcraft and upbuild their forest with the knowledge that their labors will endure. It is a forest where, as the years pass and the Scouts grow from boyhood into manhood, they may witness the results of their forest work, and that of the boys who came after them and carried forward their well thought-out plan.

The idea of such a forest originated with Local Troup 19. Enlisting the sympathetic help of a committee representing the University of Wisconsin and the Madison Section of the Society of American Foresters, the Scouts laid the aspiring plan before the regents of the University, who were prompt to act. The regents set apart and dedicated for the use of the Boy Scouts a tract of wooded university land, known as Eagle Heights, which slopes down to the beautiful shore of Lake Mendota. The tract is only a short distance from the city, and is thus readily accessible to the Scouts.

Following the action of the University regents, Dean Russell, of the Agricultural Department, selected a committee, including a Forester, Mr. Ernest E. Hubert, to act as adviser to the Boy Scouts Forest Committee which has charge of the development and management of the tract. Mr. Hubert has drawn up a ten-year plan for the use and development of the forest which contemplates the construction of trails, fire lines, picnic and camp grounds, signal towers, rustic bridges, reforestation, studies of tree growth, and improvement thinnings of the forest. The work, of course, is to be done by the Boy

Scouts year by year, thus eventually bringing the forest to an ideal state of Boy Scout use and productive service. It is interesting to note that every year an honor tree will be planted in the forest to celebrate the election to honorary Scout membership of the first boy baby born on May 1 in the city of Madison.

A nation-wide movement for Boy Scout forests, modeled on this plan of permanent use and development would be a tremendous force in American boyhood. It would indeed be a tremendous force in the forest attitude of the whole nation. Forests owned outright by the Scout troupes or dedicated to their use for a long period of years will assure not only the forest atmosphere now grievously needed by so many of our boys, but they will inspire the desire to participate, to be an intimate part of the life and development of the forest. It is not much of an incentive to a boy to enter whole-heartedly into the work of making a forest when he feels in his heart that in a few short years the land may be put to other use and his labors nipped in the bud of fulfillment. Boy forestry is complete and fully effective only when the boy's work stands and he may in after years see the fruit of his endeavors.

Opportunities for more Boy Scout forests in America seem unlimited. In numberless communities, we believe, the Scouts can easily enlist the support of local men, women and organizations which will provide them without cost with forests of their own, or at least with land upon which the boys, generation after generation, may build their own forests. What a fine thing it would be for American boyhood and for America if we had in the United States today ten thousand Boy Scout forests in the making. And we should have them.

Newsprint?

"WHO is to grow the next newsprint crop?" is a question which publishers in Canada are already asking. The question is not as idly speculative as it sounds, we are told by John W. DaFoe, Managing Editor of the Manitoba Free Press. More than thirty million newspapers are run off the presses of the United States and Canada every week day, he points out, and their raw material is really a flattened out log of spruce or balsam.

Mr. DaFoe foresees a newsprint industry driven into a corner by scarce and costly newsprint, with no hope for relief until new forests are grown, unless the rapid destruction of Canadian forests by man-caused fires is radically reduced. He calls upon the newspaper publishers of Canada to take aboard the problem of forest conservation, declaring that "The newspaper publishers of today are, if they choose to be, the principal actors in the new campaign to stop forest vandalism and place the timber resources on a basis of permanent production."

What about the newsprint crop in the United States? Speaking recently before the Kiwanis Club at Toronto, James Thompson, of that city, made this statement: "I do not hesitate to predict that in ten years economic conditions will have forced the newsprint industry from the United States to Canada to such an extent that we will be producing at least 75 per cent of the newsprint manufactured on this continent."

The economic conditions to which the speaker refers are, of course, the exhaustion of pulpwood forests in the United States. If newspaper publishers in Canada, where the newsprint industry is now centering, deem it timely to ask where the next newsprint crop will be grown, it would appear to be high time for the newspaper publishers in the United States to ask the same question in screaming headlines. As Mr. DaFoe declared "governments formulate forest policies as public opinion drives, and public opinion, to a greater or less degree, takes its mould from newspaper information."



A KING OF THE JUNGLE

A splendid example of the realism of modern taxidermy.

The Spirit of Life

How the Modern Art of Taxidermy Makes Specimens of Our Vanishing Wild Life All but Breathe Again

BY ARTHUR HAWTHORNE CARHART

IF ONE were to start a list of activities and industries dependent on the forests for existence, he would perhaps never complete the task. When the list would seem complete, it would be inevitable that he would find some other sport, art, handicraft or manufacturing process which would be in some manner, at least secondarily, dependent on the forests for its existence.

Not many years ago it would have seemed a stretch of the imagination to say that taxidermy was principally dependent on the forests for its existence. One cannot

now say that it is wholly dependent on the woodlands for its welfare. But as civilization takes the plains for cultivation for food production, and the prairie frontiers are obliterated, the animals which formerly lived in the plains countries take to the hills and forests for refuge and become forest dwellers.

In the West this is a current change. The timber wolf, coyote, elk and several species of birds which were originally plains or foot hill dwellers, are moving farther and farther into our western mountains, adapting their habits to the new homes and becoming forest citizens.

As a result, taxidermy is increasingly dependent on the perpetuation of the forests for the perpetuation of wild life. Even now in America it may well be classed as principally a secondary forest industry.

It would seem that everyone should know what taxidermy is, but amusing telephone calls come to the office of one taxidermist showing that many do not know the meaning of the word. They are often called by people seeking taxicabs! Why shouldn't a taxidermist run a taxi stand? Some who are inclined to levity might declare they are both skin games. Actually the word taxidermy is of Greek origin, meaning to arrange a skin.

It is probable in the dim beginnings of our modern civilization, men collected curious skins of unusual animals when they went on hunting or war expeditions into far countries. With these trophies they could show the folks who stayed home what a marvelous journey they had had. Then came a demand that the skins and feathers be stuffed out so that not only would the sheen of the hair or feather show, but the size and shape of the animal or bird would be approximated. This was the start of taxidermy which today is a unique combination of a science, a handicraft and a fine art.

The first mention of taxidermy in literature is in Shakespeare's "Romeo and Juliet." There may have been some practice of the art as early as the time of the story, or it may have been something which crept in through the author's acquaintance with the work of some early taxidermist. The first scientific collection of natural history was started by Buffon in Paris, France. Toward the end of the 17th Century, a man named Sloane became enthused with the collecting spirit and started a natural history group which later became the famous collection at South Kensington, England.

In France, Remaur worked at about the same time, but there seemed to be no popular interest in taxidermy until almost 1800 when Donovan of London, a publisher, brought out a booklet which was the first of many printed volumes on how to stuff animals. From then on until now there has always been a growing group of men and women who have been interested in the preservation of wild life in the form of mounted specimens.

The first animals stuffed were pretty crude attempts at imitating the form of the beast. The hide was taken from the carcass, dried, cured and then it was stretched on a wooden or wire frame and literally stuffed with excelsior until it could hold no more stuffing. There resulted animals such as never were seen anywhere but in

glass cases or hanging corpulently on the wall. They were crude caricatures of the graceful wildings from which the skins had been taken.

But as the interest in this work grew, there developed a desire on the part of the leaders to make their mounts lifelike, so they would be not merely stuffed animals but representative of the living beast from which the skin was originally taken. It was about 1875 that Dr. Kerz at Stuttgart, striving to accomplish this result, developed a technique which had as its basis the wrapping of a form over which the skin was fitted rather than stretched. Detail was modeled by minute wrappings until the whole



MATES

Though they will know no more the sweet-smelling wildwood, the artistry of Louis Jonas in preservation is so real, the expression so true, that it recalls the lines—"the deer that stands at gaze, wildly determining which way to fly."

really resembled an animal instead of a skin-covered conglomeration of excelsior and clay. A little before this time, Philip Martin, in Germany, was working for the same effect, using clay, on which the details of the animal forms were modeled until they were practically the same form as the muscle covered skeleton of the animal would be in real life.

The transition from stuffing skins to the ultra-modern art which mounts a specimen so that if you met it in the open you would expect it to charge you or run according to the nature of the beast, has been a steady growth. The beginnings were crude. Development has been slow for the industry itself has never been large, therefore only a few progressive taxidermists were at work on new methods. Many were content with the old. But there were these few who within the last score of years, almost within the last decade, have developed taxidermy until it has reached a plane of skill which makes it worthy of being classed as an art.

The most modern method of mounting specimens is by fitting the skins on a base that is as finely modeled as a piece of good sculpture. The knowledge of a naturalist must be combined with the art of a sculptor by today's expert taxidermists. With this, he must also know the technique of tanning. Modern methods have been largely developed by Carl Akeley, Dr. Wm. T. Hornaday, James L. Clark, and others in the museum field, and by Jonas Brothers, of Denver, Colorado, in the commercial field. Combining skill and understanding to a startling degree, these men, to the eyes at least, bring the dead animals back to life, endowing their bodies with natural form and their faces with natural expressions.

When these modern taxidermartists, if an appropriate new word can be coined, start to mount a skin, they have one ultimate objective in mind and that is to make a life-like animal mount. Detail, study and more detail are the prescription for much of the work. A brief sketch of just how this process is carried on at the studio of Jonas Brothers will give some idea of the

real care which these men put into their work. And it is well to remind the reader here that the Jonas family is in the business, not as museum men on a salary, with a world of time at their command, but as commercial taxidermists who practice their art on a commercial basis. They are trying to make all "stuffed animals" more life-like. Sitting in a studio room, in which hang trophies from the four corners of the earth, Coloman Jonas, eldest of the five Jonas Brothers,

sketched the steps which led to the final mounting of a deer head.

"When the head comes in from the field, it usually does not have the skull skinned out. Our first step is to take off the skin, splitting the lips so they will not slip, and carefully skinning out the ears and around the horns. The horns with part of the skull are preserved. Then the skin goes through a process of drying with salt, if it has not previously been thoroughly salted and had time to dry.

After that it goes to the pickling vat and is tanned.

"While the skin is being tanned, the mount is prepared for the skin. This is selected from our stock of moulds."

"That's a new wrinkle in the work, is it not?" I suggested. He nodded.

"Whenever we have a new mount to make, in a new position, we first make a sculptured model in clay, of the part of the animal body to be covered by the skin, then cast it in plaster, and after that we can take as many papier-maché forms from the cast of that particular pose as we wish. They are of different size and in different positions, but we have sufficient moulds to fit almost any size head of the more common animals in a number of poses."

Here was a new idea in taxidermy, a standardization which makes possible highly artistic mountings at a reasonable cost because of process standardization; standardization which lacks monotony because unusual art had been put in the early stages of the work. But as much as this phase interested me, Coloman Jonas called me back to the deer head and its trip through the process of mounting.



Jonas Brothers

A FAMILY GROUP

This coyote mount, in its trueness to life, exemplifies the development of the art of taxidermy to its present high plane in preserving specimens of our native wild life.



THE MODEL IS PERFECTED BEFORE MOUNTING

Louis Jonas at work on the modeling of a base that will be as finely done as a piece of good sculpture—which is the secret of the art of taxidermy today.

"We select the cast which we think will best fit it. Then we make a paper form in that cast from papier-maché. In this is imbedded a part of the original skull so you see that even using the cast stock form for part of the head and the neck, every mount takes on originality from the fact that the individual skull parts used are different. Then the skin is placed over the mount, not stretched, but worked on the form in such a way that there is no evidence of strain or tension.

"You see it is not a very intricate process with our modern methods once the original knowledge is obtained by our sculptor and the first forms are made."

A door opened. In came a younger man whom I immediately recognized as one of the other five Jonas Brothers who worked at this interesting business of mounting hunters' trophies and natural history groups for museums. He was in a clay-smeared smock, his hair ruffled, his hands stained with his work. He looked like a sculptor who had just dropped modeling tools.

"This is Louis, my brother," said Coloman. "He is the sculptor of our group. He should never be in this work, really, for he should be mak-

ing sculptural groups of animals to remain for years in bronze."

I shook hands with Louis and looked to where on the wall hung a panel, painted as a background of soft tinted autumn leaves, and on that panel were three deer heads, so lifelike, so true to the living models that one almost expected them to scurry back into the maze of colored aspen leaves behind them. A thought came to me that likely it was worth while to forego the joy of working in such a fine old field as sculpture in stone, clay or bronze, and pioneer in an art which now has sculpture as its foundation, but has fur and feathers placed over that sculptured base in so natural a manner as to seem miraculous in its fine, sympathetic han-



THE STUDIO

Taxidermy today is a unique combination of science, handicraft and fine art and the expert must have thorough knowledge of natural history and wild life forms as well. In this corner of the Jonas studio John Jonas is seen finishing a deer's head and Louis Jonas is working on a full size lion mount from a small clay model, seen on the pedestal at his right. The oval inset above is of a beautiful bird group.



Photograph by Gabriel Moulin

STELLAR'S SEA LION GROUP IN THE MUSEUM OF THE CALIFORNIA ACADEMY OF SCIENCES

Prepared under the immediate direction of Mr. John Rowley, this realistic group is of the largest of all the sea lions. The large male in the center of the group alone weighed 1,810 pounds. The species ranges from Ano Nuevo Island, near Santa Cruz, California, where the rookery here shown is located, northward to Bering Strait.

dling; its artistic life-like results. I believe this group of men have brought something new and worth while to all natural history collections; natural, life-like preservation of specimens of our animal life, which with some species already has become well nigh extinct.

These men are game conservationists. They are believers in sane legislation to perpetuate game. They are not as one might at first conclude, advocates of game killing, just to get trophies and for the love of slaughter. They are keenly interested in the future of our game, interested in the forests which are going to perpetuate that game, and they can be counted in the ranks of militant conservationists.

Almost impossible problems come to the artist of taxidermy. With only one bone of the animal they have been able to construct whole manikins in scale with the skin. They do this by working out the proportions of the entire frame. And from that single bone, they scale and scale, using their intimate knowledge of animal anatomy until the final result is probably within a very small fraction of an inch an exact replica of the original living animal.

"How do you get this minute knowledge of animal anatomy which permits you to model forms with every tiny surface muscle showing?" I asked Louis Jonas.

"Often from skinning dead animals."

"Not a pleasant job!"

"Of course not. But we love the work and even if it is a dirty, nasty task, if we get further understanding, further knowledge of anatomy, we cannot afford to miss any such opportunity." And then he went on to tell of how he had donned old clothes and rummaged through the "morgue" of a certain metropolitan zoo, skinning

dead tigers, elephants and other dead beasts whenever the occasion permitted, just to know, not from books but from raw first hand contact, where the bones, muscles and tendons of beasts are found so that he may put that knowledge into his modeling of the forms which will give life-like grace to a dead skin.

The next time you stand before a glass cage in a museum and gaze in wonderment at the natural appearing group of animals behind the glass, turn your mind to the relationship of this science-art to our forests, think of the early attempts to give form to skins of beasts or birds, conjure up a picture of an artist in dirty, smelly overalls in a pit skinning dead animals because he wanted to make those groups of animal mounts true to the last bunching of muscle under the hide so they would not be grotesque caricatures of the living beast. In such a brief picture you will get the beginning of taxidermy, some view into the future, but most of all, you will probably be ready to acknowledge a debt to those men who have brought the art of taxidermy out of the stuffed-animal age and placed it on the plane of artistry. In studios, studying in the field, moiling over records of other scientists, the leaders in taxidermy, both in our country and abroad, have raised it from something which must be exhibited with apology, to work which can be presented with pride.

So if you are interested in any list of industries which are going to be increasingly dependent on our forests, you may put taxidermy well up in the list. And if you are considering the interesting facts connected with such industries also, modern taxidermy unquestionably presents one of the most unusual, unique, engaging activities that can be found associated with forest life.

PUBLIC OPINION RALLIES TO SUPPORT OF FIRE PREVENTION CAMPAIGN

THE proposal of the American Forestry Association to raise by public subscription a special fund of \$50,000 yearly for a three-year educational campaign to reduce forest fires in the United States has brought nationwide commendation. Letters from every section of the country and even from Canada, endorsing the project and emphasizing its need, are being received daily at the Association's headquarters.

Mr. Rockefeller's initial pledge of \$10,000 a year is being augmented by voluntary subscriptions ranging from \$2,500 down to \$1 a year. It is the small contributions that are going to give this project its strongest public atmosphere and in the end put the budget over the top. If you have not already sent in your subscription or pledge we urge you to do so because our objective is to have the budget wholly subscribed and the educational work ready to start on January 1, 1926.

Here are a few extracts from letters picked out at random reflecting the wide-spread appreciation of the need for this work and the cooperative support which it will have.

Mr. L. W. Baldwin, President, Missouri Pacific Railroad Company:

"I assure you that we are intensely interested in anything that may be done to educate the people for the purpose of preventing so far as possible, forest fires or other destruction of our forest reserves."

Mr. Frederic Dunlap, Secretary of the Missouri Forestry Association:

"Yes indeed, I certainly do believe the forests of America are worth saving. With this letter is what I can give to prove it. There is no doubt about it but you have started the biggest thing that has come out of your city in many a year."

Mr. Frank G. Wisner, President, National Lumber Manufacturers' Association:

"I agree with you entirely in your thought that a national campaign is quite necessary if we are to bring the American people to a realization of the extent of the loss that is continually occurring through forest fires."

Sir Henry Worth Thornton, K. B. E., President Canadian National Railway:

"Please put me down as heartily in favor of your effort. You have my very best wishes and if there is anything I can do to help you, please let me know."

Mr. J. M. Hughes, Land Commissioner, Northern Pacific Railway:

*"There is certainly need for education along the lines suggested by the American Forestry Association. * * * We will be glad to contribute \$250 to this year's fund."*

In the July and August numbers of this magazine a full statement of the object of the campaign and the seriousness of the fire situation was given. These statements have been reprinted. If you would like copies, write us for them.

It is our earnest hope that everyone who is interested in seeing our forests preserved in their beauty and productiveness will give us their definite help in bringing this great movement to a successful issue.

Your contribution or pledge should be mailed to the American Forestry Association, 1523 L Street, Washington, D. C. If you cannot send money now, simply pledge the annual amount you are prepared to give when called on.

Mr. W. J. Hanrahan, President, C. & O. Railroad Company:

"I am quite in accord with opinion of the American Forestry Association that popular education in respect to the national menace of forest fires is a most reliable course in stimulating the several States and the Nation to provide fire protective organizations fully competent to cope with forest fires, and it will be our disposition to cooperate in every consistent way in the furtherance of such a plan."

Mr. Hugh P. Baker, Executive Secretary, American Paper and Pulp Association:

"I am mighty glad to see that you have launched an aggressive campaign. You know of my keen personal interest in the furtherance of the education of the public along forestry lines."

Mr. O. T. Swan, Secretary-Manager, Northern Hemlock and Hardwood Manufacturers' Association:

"Our Association is certainly in sympathy with any plan which will bring about increased fire protection."

Mr. W. C. Wheeler, Secretary, Penobscot Forestry Club:

"You have embarked on a project in which we all have an active interest. The members of the Penobscot Forestry Club have full recognition of the necessity for adequate fire protection before other definite and sustained programs of forestry can be instituted. You can therefore expect from us an attitude of being squarely behind such a program as you have outlined."

Mr. W. H. Johnson, Chief Editorial Writer, The Columbus Dispatch:

"I am interested in your communication, 'Are The Forests of America Worth Saving.' I will continue to support this and every other rational forestry movement in the editorial columns of The Dispatch."

The American Forestry Association,
1523 L Street, N. W.,
Washington, D. C.

In support of your educational campaign to stamp out FOREST FIRES I hereby contribute \$..... or pledge the amount given below for the years indicated; each annual payment to be made when called for during the year for which it is pledged.

1926.....(\$.....)

1927.....(\$.....)

1928.....(\$.....)

(Signed).....

Street.....

City.....

Date.....

State.....



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FAMOUS OLD LOGGING CAMP BALLADS

THOUGH idealized in conversation, after the manner of all ballad dialogue, this Canadian composition tells in very truth a grim story of stark tragedy. It preserves forever, in ballad form, the record of a thrilling moment, met in characteristic fashion by three strong men of the river and woods, one of whom paid the great penalty when the "jam broke."

By FRANZ RICKABY

IV. *Jim Whalen*

THE ballad, *Jim Whalen*, the stirring Canadian counterpart of *Gerry's Rocks*, was composed in Ontario, but achieved a wide popularity in our pine woods. It is interesting as being a ballad of which practically the entire historical background or foundation is known. From Mr. Chris. M. Forbes, of Perth, Ontario, who knew intimately Jim's brother Thomas, I have obtained the historical data. Mr. Forbes had also met and talked with Peter McIlquham, an old shanty foreman, who was one of the three in danger mentioned in stanza 4 of the ballad.

The name of the hero is properly spelled "Phalen," though usually pronounced "Whalen." The tragedy in which Phalen lost his life occurred in 1878 at a place on the Mississippi river in Ontario known as King's Chute, a small white water section (*i. e.*, a rapids) of the river, located in the county of Frontenac, caused by the contraction of the stream flowing over a pegmatite dam at this point. In the Chute there were two particularly precipitous passages known respectively as the Upper and the Lower Falls.

Jim Phalen was serving as a riverman under "Old Quebec," a French-Canadian foreman whose real name was Edward Leblanc. McIlquham was also a foreman on that river at the time. Both rafts of logs, "Old Quebec's" and McIlquham's, had come out of Cross Lake, known as Crotch Lake by the rivermen, and McIlquham had come down to assist "Old Quebec" in putting his logs through the Chute, where a dangerous and difficult jam formed. "Old Quebec," McIlquham, and Phalen were close together when the jam shifted suddenly and precipitated Phalen into the water.

He was swept under the water, but as the jam was close and tight he went only a short distance. "Old Quebec" called for a pike-pole, and in attempting to

release Phalen he himself overbalanced, went into the water, and was hurled and tossed all the way through the Chute, but came out alive. In about an hour's time others were successful in recovering Phalen's body by looping a rope over one of his boots. McIlquham assisted in pulling him out. The Peter McLaren referred to was one of the big lumbermen operating on the Mississippi river at that time. He accumulated a large fortune and became a Canadian senator. He died only a few years ago.

The version of the ballad given here is that given me by Mr. A. C. Hannah at Bemidji, Minnesota, early in 1923. Mr. Hannah was born and raised in Canada, not ten miles from the scene of the tragedy. He remembered Phalen's death very well, being sixteen years of age at the time. His account of the affair accorded well with that of Mr. Forbes, even to the names of the other two men referred to in stanza 4.

Having such a complete supply of dependable information as to the actual foundation of the story, it is easy (and very interesting) to see what liberties the ballad-maker has taken with the facts of the case. Stanzas 1 and 4 are almost the only ones which approximate probable fact. The first line of stanza 2 very likely tells the truth, inasmuch as any drive depended upon the spring thaw and high waters. Here authenticity stops. The conversation is idealized after the manner of all ballad dialogue; the sudden breaking off of the hero's speech is highly dramatic. Stanza 5 makes spectacular, protracted, and sounding what was in reality suddenly prosaic, grimly sudden, and still. But by way of compensation the erring ballad-maker has enthroned two excellent human qualities—physical courage and devotion to duty, both of which the shanty-boy possessed in an inspiring degree. As for the eleventh-hour call

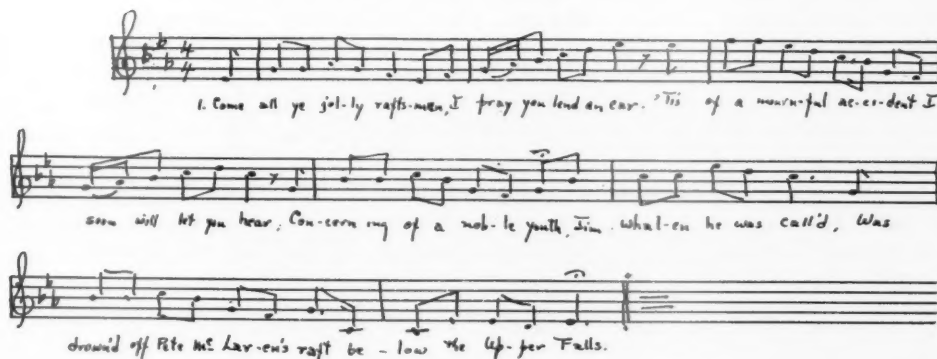
on God, that is a note found more in songs about the shanty-boy than in shanty-boy life itself. Mr. Stewart Edward White hits it off more true to life when, in his novel, *The Blazed Trail*, he makes Jimmy Powers, hopelessly caught below the face of the suddenly broken jam, hurl his hat defiantly into the destruction towering over him, and amid the growing roar of flood and timber shout to his fellows in safety, "So long, boys!" Balladry used to do things like that, back in the days when Douglas and Percy fought; but something happened, and balladry died. . . .

It is in connection with this ballad that Mr. Forbes mentioned to me a singing custom among shanty-boys and sailors, a report which my own experience has amply verified. Referring to an old singer of the "come all ye" type, Mr. Forbes said that the old fellow sang with much pathos and with "that peculiar dropping off

of the last word from a singing tone to a speaking voice." As I intimated, I have myself heard many old singers do this, sometimes speaking the entire last line. It is an open and unmistakable indication that the song is at an end; and, I may add, until one becomes somewhat accustomed to hearing it done, the effect is rather droll.

Versions of the ballad of Jim Whalen are very uniform. Whether there were ever more than six stanzas to it or not, I cannot say; I have never seen or heard of any version with more. The version sent me by Mr. Forbes from the ballad's native heath has six, and varies in its expression in only three or four places. The most notable of these variations occur at the opening, where the singer addresses not the "jolly raftsmen," but "Gentlemen and maidens"; and in the name of the hero, which is spelled correctly.

Jim Whalen



- 1 Come all you jolly raftsmen, I pray you lend an ear,
'Tis of a mournful accident I soon will let you hear,
Concerning of a noble youth, Jim Whalen he was called,
Was drowned off Pete McLaren's raft below the Upper Falls.
- 2 The rapids they were raging, the waters were so high.
Says the foreman unto Whalen, "This jam we'll have to try.
You're young, you're brave and active when danger's lurking near.
You're just the man to help me now these waters to get clear."
- 3 Young Whalen then made answer, unto his comrades bold,
Saying, "Come on, boys, though it's dangerous, we'll do as we are told.
We'll obey our orders manfully, as young men they should do—"
But while he spoke, the jam it broke, and Whalen he went through.
- 4 Three of them were in danger, but two of them were saved;
But noble-hearted Whalen met with a watery grave.
No mortal man could live in such a raging watery main,
And although he struggled hard for life, his struggles were in vain.
- 5 The foaming waters roared and tossed the logs from shore to shore.
Now here, now there his body seen tumbling o'er and o'er.
One awful cry for mercy: "O God, look down on me!"
And his soul was freed from earthly cares, gone to eternity.
- 6 Come all ye jolly raftsmen, think on poor Jimmy's fate;
Be careful and take warning before it is too late.
For death is lurking near you ever eager to destroy
The pride of a fond father's heart, likewise a mother's joy.

The Land Riddle of the Lake States

(Continued from Page 518)

forty-seven million acres in the Lake States but Federal purchase of such an acreage means that it will be devoted to the business of producing forests, that it will be thoroughly protected from fire and that through these activities and the improvement work incidental to them, the states and counties will be at once compensated in part at least for taxes which in a few more years bid fair to be lost through reversion. It means further that a future revenue producing resource will begin to clothe the lands, or if a part of the purchased area is second growth and lake shore country, some early revenue will be available to be shared by federal and local government. This activity will stimulate the practice of forestry on nearby private lands and the National Forests themselves will have local effect comparable to that of the establishment of a small industry.

Township and county governments, however, will not lose sight of the fact that large blocks of land purchased and controlled by the Federal Government will mean that these lands will pay no taxes. They may well ask where the expenses for local government may then be obtained. Much of the land which would be taken over for National Forests is so assessed that taxes amount to forty cents an acre. Reverted land to which the state takes title in Michigan, moreover, costs the state five cents an acre annually which is paid to the townships in which it is located. Local governments thus struggle along, in the worst of this cut-over empire, through such taxes as they can collect, and through limited state help.

But a National Forest by no means removes its area from the status of a local revenue producer. Even when the land is barren to start with, improvement work in the way of roads, trails, telephone lines, headquarters and fire towers must be built to assure proper administration of the area. Local help is employed in this work wherever possible, and Federal money is turned into wages which are spent for living expenses in the local communities. Further local employment is given through reforestation. Trees must be grown in forest nurseries and planted on barren lands. This work now represents an expenditure of almost three dollars an acre, over a limited area each year, and it will become an increasing activity of the Forest Service as more land is taken over. As things are now going in these districts of land reversion it appears to be a choice between the local expenditure by Uncle Sam of several dollars an acre or a nickel an acre paid by the state as a charitable tax.

Another thing to be borne in mind is that much of the road work and other public improvements, as well as the duties of assessing and tax-collecting forces in National Forest areas, cease to become a township ex-

pense and the need for local revenue from taxes is somewhat reduced. Looking to the future, the destinies of many northern communities are linked with surrounding forest land and in more than one case reforestation of new National Forests will mean a supply of raw material for groups of industries.

According to E. A. Sherman, of the U. S. Forest Service, the 3,160 acres reforested on the East Tawas Division of the Michigan National Forest last season at \$2.94 an acre will yield as the counties' and state's share of revenue \$315,000 in 1974, and from that time on will continue an average return of almost \$2.00 an acre a year—a long time coming, perhaps, but better than the present 5 to 40 cents a year. This local yield from reforestation does not take into account the \$2.75 an acre annual return as the Federal Government's share after all expenses of growing, protecting, harvesting, interest and insurance are paid. This example is taken from typical sandy pine land in Michigan.

Tax losses, therefore, do not loom so important when it is understood that forestry is an active business and means the steady creation of revenue producing resources from land which is headed for the financial junk pile if left alone.

Participation in solving the cut-over land problem of states is not merely a paternal act of the Federal Government; it is a procedure justified by the interstate character of service which the forest resources of the Lake States must give. It was the forests of Michigan, Minnesota and Wisconsin which made possible the rapid development of more than a million farms in the middle western states. The forests of these states had no small share in building up the great commercial metropolis of Chicago, and even now form an important hinterland for this gateway to the plains.

It is the remaining green forest cover and the wealth of lakes and streams which call fishermen, hunters, and seekers for rest to the still wildernesses. Thousands of tourists come from many states, as far south as Texas, west to the Rocky Mountains, and east to Pennsylvania. They leave in north woods country which entertains them \$150,000,000 every year. Returning they carry away strength, energy and health for the accomplishment of work which must be done. These people—non-residents though they may be—are vitally interested in green forests. Blackened idle lands have nothing to offer them.

Health, timber, fish and game—these are not forest products which concern the Lake States alone but the entire nation. The administration of a part of the vast neglected empire of the north woods, therefore, is properly a Federal matter.

Another important consideration from Uncle Sam's side is the fact that his system of National Forests

(Continued on Page 560)

A PARADISE HOME IN THE BLUE RIDGE FOOTHILLS

*"HIGHLAND ORCHARDS," one of Virginia's finest farm estates is FOR SALE
It MUST be sold to settle an estate—a RARE opportunity*

"Highland Orchards"

is in the historic Charlottesville section—40 minutes from the University of Virginia—1 mile from the main line station of the Southern Railway, 4 hours to Washington, D. C. Virginia's finest state highway leads past the estate entrance. 4 minutes' walk on the new macadamized road to schools and churches.



150 ACRES OF ORCHARDS

4500 Pippin, Winesap and Jonathan apple trees, all full bearing in 1925 or 1926. 700 Peach trees will bear first crops this year.

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is also a big-business farm, producing proper investment income from tremendous crops of fruit, grain, hay and excellent pasturage. The 575 acres include 300 fertile level acres under cultivation, 150 acres of healthy orchard, mostly of full bearing age, and 125 acres of pasturage and fine timber. It is an ideal farm for the business farmer.

The Highlands

residence has 10 large rooms, and all conveniences including gas and water, hard wood floors, sunrooms and gardens of charming seclusion. All buildings are practically new and everything is in first class condition.

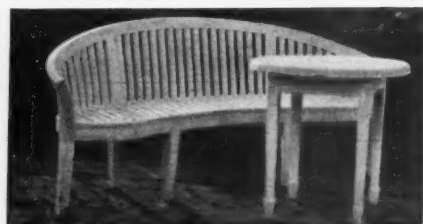


A group of modernly equipped livestock barns, chicken run and garage are connected with the liberal water supply. Out-buildings include tool and supply houses, smoke-house and granary, ice house, etc. 7 modern cottages for employees scattered over estate.

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**2½x3 ft.
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Forest Conservation

In response to the demand for popular, condensed and authoritative information on the conservation of our forests and dependent wild life, The American Forestry Association has prepared a thirty-two page booklet covering the more important popular phases of the subject.

The cover, which is suitable for framing, portrays in a rich two-tone effect, one of the most magnificent forest scenes it has been our good fortune to secure. The booklet is 9 x 12 inches, printed on high grade coated paper and brings together in one volume the following articles which have been published in past issues of AMERICAN FORESTS AND FOREST LIFE.

THE FOREST CUPBOARD.....Ovid M. Butler
50,000 FIREBRANDS.....E. T. Allen
WILD FOLLOWERS OF THE FOREST.....Aldo Leopold
MORE FORESTS—BETTER FISHING.....Dr. Charles Reittell
BIRD GUARDIANS OF THE TREES.....Dr. E. H. Forbush
FORESTS AS NATIONAL PLAYGROUNDS.....James E. Scott
THE RETURN OF PENN'S WOODS.....Robert B. Vale
BALANCING THE FOREST LEDGER.....Col. William B. Greeley

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THE AMERICAN FORESTRY ASSOCIATION
1523 L Street, N. W. Washington, D. C.

Mention AMERICAN FORESTS AND FOREST LIFE—It Helps

The Land Riddle of the Lake States

(Continued from Page 558)

should be well distributed geographically in the various forest regions, if they are to inspire nearby private owners to protect and manage their forest lands. Surely the importance of the Lake States region should merit the holding of more than the present 2½ per cent of forest area.

Vastly more land must also be put under state administration within the next few years if the states are to do their part in working out the answer to the great land riddle. In fact the creation of state forests is a most logical use of the areas which have reverted or are on the way to reversion for non-payment of taxes. Besides these areas others should be purchased as state forests through the issuance of bonds in the same manner that other great public works are financed. Michigan has splendid experience in the management of such tracts. Minnesota also has proved their advantage and Wisconsin has the necessary legislation to go ahead. There is no good reason why they should not be energetically engaged in the profitable business of growing timber and creating green cover for wild life. This development on the part of the states is certain to be stimulated by the example of Uncle Sam.

The people of these three states will not overlook the opportunity for Federal aid in working out their cut-over land salvation. It is not improbable that some of the larger holders of idle land will turn over as gifts to the United States several hundred thousand acres. Such gifts may now be accepted under a special provision of the Clarke-McNary Act, and from the owner's standpoint the shifting of a burden of improvement, hard for him to carry, might make the transfer worth while.

Uncle Sam's Lookout

(Continued from Page 539)

last settlers, mainly hardy and thrifty Mormons overflowing from the Utah settlements far to the North. Past the very site of the tower, Uncle Sam's soldiers cleared a military road between two of his Indian fighting army posts of the early seventies and here traveled scouts, wagon trains, and troops of cavalry in faded Army blue. Still later in the desert country below the tower and well within sight there was waged a bitter and bloody war between those early rivals—sheepmen and cattlemen—for the vast grazing ranges. Finally to the North two bands of steel were laid and the romance of railroad construction pushed into the past the romance of the covered wagon and all that had gone before.

The first to see the sunrise, the last to see it set, the lookout, who rides the glassed-in deck of the new steel tower, looks down upon the Great Southwest.

Serious Forest Fires in France

It is a common impression with many people in the United States that forest fires in France never reach serious proportions. This apparently is not altogether true, as witnessed by the terrible fires reported in France during the past summer.

The London Morning Post, for example, reported that "the great forest fires in the Esterel region of the Riviera have at last been checked."

"The magnificent Maures forest has for the most part been reduced to cinders and presents a terrible scene of desolation."

It goes on to state that "the forests of Adrets, Mont St. Jean, Mont Vinegre, Mont Mandelier, and Mont Trimblane have been completely destroyed. These densely wooded heights resembled huge furnaces when the fire was at its worst.

"It is impossible to estimate accurately the amount of damage, but the losses arising from the destruction of forests, chateaux, and cottages must be at least thirty million francs. Five persons are known to have lost their lives."

Old Moccasin Boggs

NOTE—Twenty per cent of the fires on this district are caused by coon and possum hunters using pitch-pine torches."—(Extract from Ranger's report.)

Old Moccasin Boggs had fourteen dogs,
A wife, ten children and twenty-two hogs,
The chills and fever, a mean disposition,
And a ten-acre farm by no means enrichin'.

A rat-tailed 'possum lived up on the hill,
Of 'possum the Boggs would eat their fill,
When Moccasin's pups had bayed to the moon
That the death of a 'possum would come very soon.

But a man hasn't eyes like those of a cat,
And the night was as dark as the inside of a hat;
So old Boggs built a torch of pitch-fattened pine,
That burned with a flare like gasolined twine.

Every place that Boggs went there blazed a fire,
The flames flew up to tree-tops and higher,
While the rangers grew hoarse with the things they
said.

And swore by Paul Bunyan they'd have Boggs' head.

Boggs got his 'possum, the fire got the trees,
The rangers got Boggs. Out of jail-bars he sees
That using a torch to light up his way
Is a perilous stunt and one that don't pay.

—Charles V. Brereton.



BRAND'S 'GOLD MEDAL' PEONIES

WE are offering for sale this fall 12 new varieties of peonies never offered to Peony lovers before:

Blanche King, Ella Christiansen, Hansina Brand, Hazel Kinney, Laverne Christman, Mrs. A. M. Brand, Mrs. F. A. Goodrich, Mrs. Harriet Gentry, Mrs. John M. Kletsch, Mrs. Romaine B. Ware, Myrtle Gentry, and Victory Chateau Thierry.

At the American Peony Society's Show held in St. Paul, Minn., the largest Peony Show ever held in the world, we were awarded the Society's Gold Medal in Class 1, the largest class of the show.

We were also awarded a Gold Medal on our new Peony, Mrs. A. M. Brand, and a Silver Medal on our new Peony, Myrtle Gentry. The judges, in making the award, said that the above list constituted the greatest display of new peonies ever made.

At the St. Paul Show, while these flowers were on display, we sold, in two hours' time, to people who saw the blooms, \$5,500.00 worth of roots—for delivery in the fall. We still have a few roots of each variety for sale. We will not offer them again until 1927.

You will want some of these the world's choicest and most beautiful peonies, for your fall planting; therefore, write today for Brand's FREE catalog of Peonies and Iris, giving varieties with full description, and prices.

BRAND'S BIG PEONY MANUAL, which we consider the most complete and up-to-date work ever written on the Peony, gives the history of that flower, its culture and varieties. Price 35c, but that amount may be deducted from price of your order.

THE BRAND PEONY FARMS

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"The Insecticide Supreme"

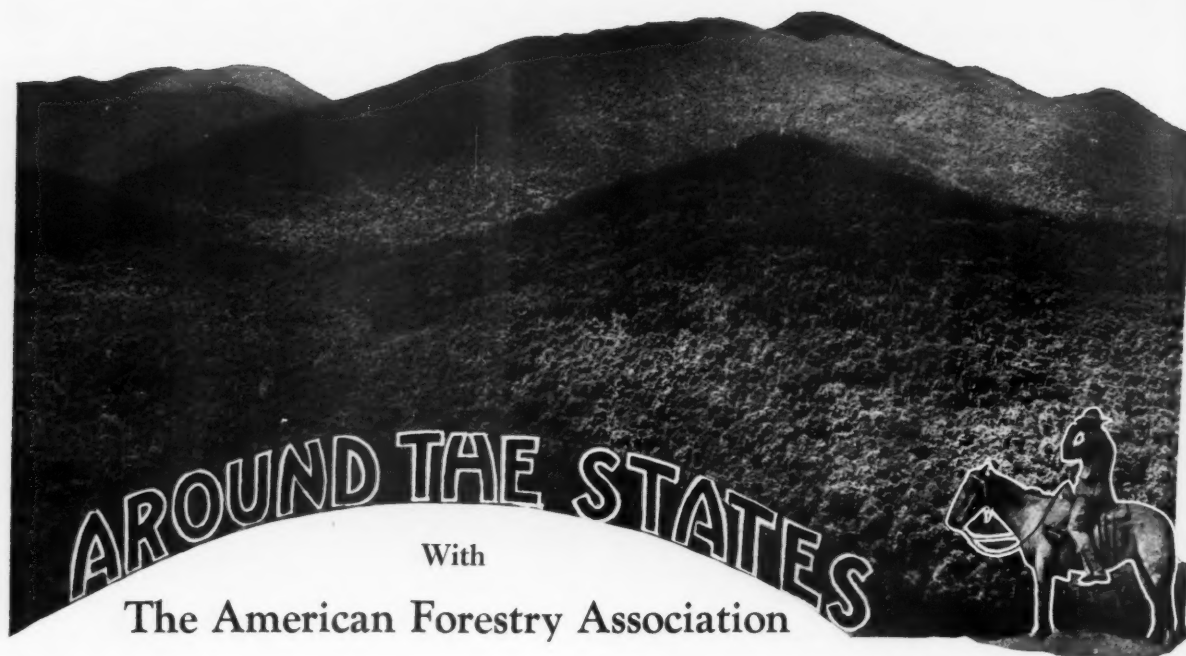
Used exclusively on such well-kept estates as those of Mrs. Harold I. Pratt, Secretary of The Garden Club of America; Mrs. John A. Stewart, Jr., Vice-President of The Garden Club of America; Mrs. Walter P. Bliss and many others.

Controls Box Mite, Lace Fly on Rhododendrons, Azalea Beetle, Thrip, Leaf Hopper, etc.

1-GALLON CAN.....\$3.00	25-CALLON DRUM.....\$50.00
1 5-CALLON CAN.....10.00	50-CALLON DRUM..... 90.00

Andrew Wilson
INC.

SPRINGFIELD, NEW JERSEY



OREGON LEGISLATURE STUDIES REFORESTATION

A special commission, consisting of State Senators Bruce Dennis and Russell Hawkins, and State Representatives E. G. Bates and R. H. Chapler, has been appointed, in accordance with a resolution adopted at the last session of the Oregon State Legislature, to study timber taxation and reforestation and to draft bills looking to an adequate state forestry policy.

CONNECTICUT FISHERMEN WILL HAVE A CHANCE

One of the most interesting acts of the last General Assembly of Connecticut was the appropriation of \$50,000 for the leasing by the state of streams flowing through private land and posted against public fishing. These streams, leased by the Board of Fisheries and Game, will be opened to the public and will thus solve a problem for many who have heretofore had a hard time to find a place to fish.

ELEVEN-YEAR-OLD CHEST- NUTS FREE FROM BLIGHT

Hope that blight resistant chestnuts may be developed to replace the native trees so universally subject to the blight, is strengthened by the resistance shown in the Chinese specimens grown by the Department of Agriculture at Bell, Maryland. The trees planted in this orchard were brought from China which is thought to be the native home of the chestnut blight, and the Department has

been successful in growing a large number of trees from nuts harvested from the early specimens and from recent importations of seed direct from China. The plan is to distribute eventually

GEORGIA PASSES STATE FORESTRY BILL

On August 14, Governor Walker, of Georgia, signed the Rountree Forestry bill passed early in August by the State Legislature. The bill provides that all privilege taxes on forest products industries in the state shall be converted into a state forestry fund for the support of a department of forestry. A State Board of Forestry is created, consisting of nine members and having authority to appoint a State Forester and to cooperate with all agencies and citizens in successfully working out Georgia's forestry problems.

The new forestry law is the result of several years' hard work by the Georgia Forestry Association, the press of the state, and other agencies including The American Forestry Association.

Bonnell H. Stone, former president of the Southern Forestry Congress, who has worked hard for the passage of this bill in the Georgia Legislature, writing to The American Forestry Association on August 14, said, "We appreciate your interest in Georgia in the same degree that we are grateful to you for the splendid foundation work you assisted in."

A forestry contract bill providing for deferred taxation and a yield tax on land registered with the state for the production of forest crops has passed the Senate and at the time of going to press is before the House of Representatives for action.

Georgia is the thirty-fifth state in the Union to establish a department of forestry or to appoint a state forester.

among cooperators, a large number of the resistant specimens and to retain enough in the Bell orchard to serve as a source of seed supply. Trees come into bearing when 6 or 7 years old.

MICHIGAN WILL USE CONVICT LA- BOR FOR REFORESTATION

Convict labor formerly employed in state road construction will be used for reforestation work in Michigan, according to a recent announcement of the Department of Conservation. Increase in appropriations makes possible a great expansion of this work, while the State Highway program will be somewhat curtailed.

NEW JERSEY PLANS FURTHER STATE FORESTS

The next session of the New Jersey Legislature will be asked to make not less than \$250,000 available for purchase of state forests during the following year.

With the close of the present fiscal year additions amounting to 2,000 acres were purchased and placed under administration as parts of the present state forests. The goal is 200,000 acres or more.

BANKERS ADOPT FORESTRY MORTGAGE CLAUSE

Hereafter mortgaged lands in Louisiana will usually be subject to the following clause, approved in April, 1925, by the Louisiana Bankers' Association: "The mortgagor does hereby further bind himself to put his waste or idle lands not suitable to agriculture to trees, and to protect all forest trees and tree seedlings growing on any of the above-described lands; and he further pledges that fires or other destructive agencies will be prevented wherever possible."



Realistic Decorations for the Home, Office or Den of Nature Lovers

A lifetime devoted with love and enthusiasm to the art of taxidermy is the real secret behind the life-like expression of Jonas mountings. It is in recognition of the fine art which master craftsmen can put into this work that big game hunters from every quarter of the globe send their prized trophies to us for mounting.



Do you not feel that *your* trophy, representing all that remains to remind you of your hunting trip, deserves to be mounted by real artists—particularly when the cost is not excessive but very moderate, quality of work considered?

For those who wish to decorate the home, den, mountain cabin or office with realistic specimens of wild life of forest, mountain or plain, we have a wonderful assortment of game heads, rugs and also appropriate game novelties.

Send for our beautifully illustrated 36-page catalog. It will charm and convince you—giving you a new conception of what art in taxidermy can accomplish. It is richly illustrated—a masterpiece of printed art—and it is free. Send for it today.

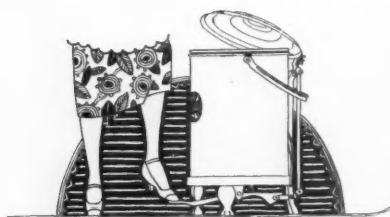


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Making footwork do housework

THERE is no bending or stooping with the Hygia Refuse Can. Just step on the pedal and up jumps the lid automatically, leaving both hands free. Doctors and hospitals everywhere use it because it is so handy and so easy to keep clean.

It is ideal for your kitchen, your nursery or your garden paths. Finished in white enamel with nickel-plated trimmings. A galvanized inside pail which lifts out by the handle, makes it easy to empty.

\$6.50

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Summer Cloud is a large-flowered white hybrid of great beauty. Two-year-old plants: \$1.00 each, \$10.00 per dozen, prepaid. (Seeds \$.50 per package.)

Garry-nee-Dule, blue hybrids, specially selected 2-year-old clumps, \$.50 per dozen, \$35.00 per hundred, prepaid. (Blue hybrids, good selection for LANDSCAPING, \$2.50 per dozen, \$15.00 per hundred, prepaid.)

D. Belladonna and D. Bellamosum, strong field clumps, \$2.50 per dozen, \$15.00 per hundred, prepaid.

"Hardy Plants for the Home Garden"

is the title of my catalog of perennials, which I will gladly send on request

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It is the greatest protection in the world. Our catalogue No. 40 describes our fences and method of construction. This cut shows our fence that surrounds the Yale Bowl Field. This fence is used chiefly for an outside boundary fence. We have straight fences for the inside or division fences. We have many other popular designs of fences. ESTIMATES cheerfully FURNISHED on MATERIAL only or FENCES ERECTED COMPLETE.

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MICE AND FIELD MICE

ONE RAT in the house or warehouse, a field mouse in the orchard, shrubbery or tulip bed, will destroy more property value than the cost of exterminating the entire breed on your premises.

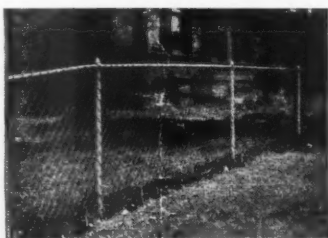
DR. WM. T. HORNADAY says: "This is the first time any rat-extermination scheme has worked out here with unqualified success * * * slaughtering the hordes of rats that we have been steadily fighting for 20 years."

You may apply THE RATIN SYSTEM at expense of few dollars, or purchase small-cost contract for extermination by RATIN SYSTEM experts with no trouble to you.

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Copies of the 1923 and 1924 index of AMERICAN FORESTS AND FOREST LIFE will be sent to members on request.

NEW ROCHELLE DEVELOPS NATURE STUDY WOODS

Through the efforts of Miss Katherine Dolbear, director of elementary science in the public schools of New Rochelle, New York, a tract of 115 acres of woodland has been set apart by the Westchester County Park Commission for the exclusive use of nature study and conservation experiments. The woods are located within a quarter of a mile of the new Woodrow Wilson High School and are easily accessible from two carlines. More than 2,000 forest and shade trees were planted by school children in this tract last spring, and trees and shrubs bearing fruits which will attract birds are considered for future planting operations. A large number of the plant specimens will be labeled. A seventh grade of one of the nearby schools is making an inventory of the resources of the woods and numerous pupils have prepared maps showing paths, brooks, swamps, rock outcrops, and indicating the haunts of particular flowers.

Future plans include the setting aside of a portion of the woods as an erosion model where vegetation will be removed from one slope located nearby a check area where the vegetation is undisturbed. This will be visited after hard rainstorms to observe the effect of vegetation in preventing erosion.

Miss Dolbear is enthusiastic over nature study in the woods and has had remarkable success in inspiring an interest in nature among the school children of New Rochelle.

TETON LANDSLIDE ATTRACTS TOURISTS

According to advice from Forest Supervisor A. C. McCain of the Teton National Forest it has been necessary to designate parking grounds and to grant a special refreshment stand concession at the terminal of the auto road reaching the point nearest the Gros Ventre landslide which occurred on the afternoon of June 23. The forest officers report that the slide extends a mile up and down the river and besides destroying the Huff Ranch, rated as one of the best in Jackson Hole, has also ruined the Card Ranch and destroyed a large number of cattle which were being driven through the canyon about five minutes before the slide occurred. Cowboys in charge of these cattle had a narrow escape. The river is bone dry below the slide and crops in the valley will no doubt suffer from lack of irrigation water. Level lines which had been run indicate further that if the slide effectively holds water to the crest, the Horsetail Ranger Station will be inundated, although at present the freak reservoir is filling very slowly.

ALLEGHENY FORESTERS MEET

Forty-six foresters employed in 15 States attended the Summer meeting of the Allegheny Section, Society of American Foresters, July 23-25. Starting from Newton, New Jersey, where a business meeting of the Section was held, the group was piloted by State Forester Wilbur and his staff from the Stokes State Forest in the north to the Bass River State Forest in the south.

Frequent stops were made during the several hundred miles traversed during three days travel through the wooded sections of New Jersey to afford time for the observance and study of State, City, corporation and private forest organization and management.

The diversity of forest conditions and management required over the area traversed were forcibly illustrated by the hardwood stands of the ridges and slopes on the mountains of the north and the pine flats and cedar swamps of the south.

Those not previously acquainted with the localities visited were particularly impressed with the possibilities of intensive forest management because of the splendid opportunities for profitable utilization due to nearby markets, and with the work the State Department of Forestry is doing in managing state owned lands and educating other woodland owners in the practice of profitable forestry.

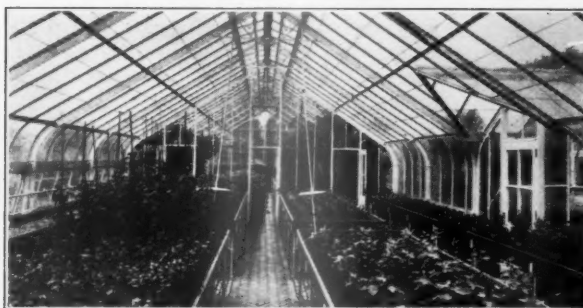
At an informal meeting held in Trenton practical methods of fire prevention and suppression were discussed.

GENERAL FEDERATION TO EMPHASIZE FOREST FIRE CONTROL

At the biennial council of Conservation Committee Chairmen of the General Federation of Women's Clubs held at West Baden, Ohio, recently, Mrs. W. W. Milar, Chairman of the Division of the Conservation of Natural Resources, urged the necessity of stressing forest fire control above everything else in the conservation work of the Women's Clubs during the coming year. A synopsis of the forestry situation in the various states, prepared by The American Forestry Association, was distributed to the Chairmen.

FORESTRY FACTS WILL BE PUT BEFORE THE BUREAU OF THE BUDGET

General Herbert N. Lord, of the Bureau of the Budget, has agreed to grant a hearing to The American Forestry Association and allied organizations in behalf of the forestry items of the agricultural and other appropriation bills. This hearing has been undertaken with a sincere effort to present to the Bureau of the Budget facts which by their very magnitude should carry a strong argument for adequate support of forestry askings. The hearing will be held on September 28.

LUTTON V-BAR Quality Greenhouses

Interior of Emil Winter's V-BAR greenhouse, Pittsburgh, Pa.

THE GREENHOUSE

which SERVES and SAVES

THERE is nothing cheap about the Lutton V-BAR Greenhouse. Only the best of materials are used throughout. The Greenhouse is built to serve and to save, and it does both. The extra first cost is slight, but the resulting economies in up-keep reduce maintenance to almost nothing.

Let us tell you where you may see a Lutton V-BAR Greenhouse in your vicinity, and when you inspect it give particular attention to the following points:

- The shape of the Patented V-BAR—You will see at once why it admits more sunlight.
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Then ask about the lost cost of operation and maintenance.

We are getting out a new catalog, and shall be glad to send you one as soon as completed.



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FOR WINTER BEAUTY: Broad Leaves and Conifers, Tall, Dwarf and Trailing.

FOR \$5.
5 Rhododendron maximum
(Or 5 Kalmias or 5 Am. Hollies).
1 Douglas Fir, 1 White Fir
and 1 Am. Hemlock
(Red Cedar or White Pine may be substituted).
30 Evergreen Cover Plants
and Vines.

All guaranteed bushy, well-rooted trees and plants, 1 to 1½ feet high, B. & B. by express, your expense.

BOXWOOD, PYRAMIDAL, 1, 1½ to 2 feet, B. & B. by express, \$10 per pair. Bush shapes 1 to 1½ feet, \$2.50 each.

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English Portable Hurdle Fence

of rough split chestnut, in sections 8 ft. 3 in. long, making a fence 4 ft. high. Suitable for Horses, Cows, Sheep, and Pigs or for general use. A touch reminiscent of English Country Estates, dividing adequately without disfiguring the landscape.

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Birds and Berries in Winter Gardens

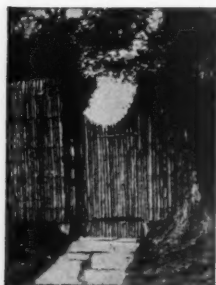
SHRUBS with brilliant berries, and bright colored bark, attract winter birds and add to the garden's charm. Then you want a few surprises, for who knows when the Jasmine or the fragrant Honeysuckles will open, or the pussy willow expand its silky catkins? The Witch-hazels, vernal and Chinese, provide ten weeks bloom in mid-winter.

WRITE us or come to see us, that we may more fully discuss a winter garden on your place. There is no better time than now. Our specially prepared plants are ready to move anytime.

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Gives privacy and protection; adds a touch of beauty!

Made in France of live chestnut saplings, woven together with wire, reinforced on back with horizontal wood strips, in sections ready to erect. Suitable for screening gardens, service yards, etc., or for eliminating

objectionable views. Furnished 6 ft. 6 in. and 4 ft. 11 in. high.

WOVEN WOOD FENCE
ROBERT C. REEVES CO.

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OFFSPRING OF HISTORIC TREES SETTLE IN NEW YORK

Joan of Arc willows, Robin Hood oaks, and other historic trees are to be Americanized by the New York State College of Forestry at Syracuse. The willow cuttings from the grounds around the chateau at Doremy where Joan of Arc was born have been set out and acorns from the Robin Hood oaks planted on the college grounds. Cuttings and seeds from famous American trees will also be planted in this novel arboretum and each tree will be marked with an outline of its history.

PULPWOOD CONSUMPTION SHOWS A SLIGHT DECREASE

The total production of wood pulp in 1924 was 3,723,266 tons, a decrease of 1.7 per cent as compared with 3,788,672 tons for the previous year, according to a recent announcement by the Department of Commerce which is cooperating with the Department of Agriculture in collection of production data. Six states produced the major portion of pulp in the following order: Maine, Wisconsin, New York, Pennsylvania, New Hampshire and Virginia. Slightly over 2,000,000 tons of domestic spruce are represented in each year's production which is 36.1 per cent of the entire output in 1924 and 37.4 per cent of the 1923 total.

It is interesting to note from the statement that the amount of pulp produced from slabs and other mill waste increased from 1.8 per cent of the total in 1923 to 2.1 per cent in 1924. The two woods which are imported for the production of pulp are spruce and poplar, totaling over 25 per cent of the amount of pulp wood used in the United States in 1923 and about 18 per cent in 1924. Other important woods listed are hemlock, yellow pine, balsam fir, yellow poplar, white fir, jack pine and tamarack. There were 239 mills operating in 1924 against 241 in 1923.

NEW JERSEY STATE FORESTER PUSHES SHADE TREE WORK

While New Jersey has been noted for its wealth of shade trees, State Forester Wilber has been busy during the past year in promoting greater activity through the State Highway Commission and through the organization of a number of municipal shade tree commissions. One county shade tree commission has been started under the 1924 County Shade Tree Act and several other counties plan to establish commissions in the near future.

Municipal water companies and other public interests also have been active in reforestation. More than three-quarters of a million seedlings were furnished by the State Forester's office to land-owners during the past season. It is estimated that more than a million will be needed to supply next year's demand.

BOYS AT PLAY DISCOVER ANCIENT RUIN

Recently in New Mexico, near the Gran Quivira National Monument in the south central portion of the state, two boys while playing, saw a slight elevation of the ground and becoming curious started digging into it. At about eight inches the boys struck the top of a wall made of rocks which extended about 12 inches. Below that, the wall was of adobe. Excavations were followed only to a distance of about three feet, but it is estimated that the walls of the newly discovered building will measure about 159 feet from north to south, and about 90 feet from east to west. The boys also discovered in their digging some food bones and pottery.

A presidential proclamation in 1909 reserved the Gran Quivira National Monument in order that one of the most important of the early Spanish mission ruins in the Southwest might be preserved. Within the monument boundaries are also contained the ruins of ancient pueblo dwellings.

GYPSY MOTH PARASITES LIBERATED IN NEW ENGLAND

More than 2,500,000 gypsy moth parasites were liberated last spring outside the area where the species is now common. This work was done by the Bureau of Entomology of the United States Department of Agriculture and concerns eight distinct species of gypsy moth parasites. One interesting species of these helpful emigrants was obtained by collecting the cocoon of the pine sawfly, one of the hibernating hosts of the parasite in Southern Poland early last spring. The cocoons were taken to Bremen, Germany, where they were reared and shipped to the laboratory at Melrose Highlands, Massachusetts.

LOUISIANA STATE FORESTER RESIGNS

Announcement has been received of the resignation of Mr. V. H. Sonderegger as State Forester of Louisiana. Mr. Sonderegger's resignation comes on the heels of the announcement by Governor Fuqua of the appointment of Dr. V. K. Irion as Commissioner.

Mr. Sonderegger has been State Forester for nearly five years, and his loss will be severely felt. The very rapid development of forestry in Louisiana, perhaps the most rapid of any state in the South, is largely due to his activity. He will become associated with Banzhaf & Watson, Inc., Forest Engineers of Milwaukee, Wis., as resident partner in charge of their forest engineering work in the South. He will maintain his home in New Orleans, where the Southern offices of the firm will be located.

FEDERAL HORTICULTURAL BOARD PROPOSES EXTENSION OF BLIS- TER-RUST QUARANTINE

Certain changes in the white pine rust quarantine are anticipated after a meeting of the Federal Horticultural Board early in September. At this time the Board will review the record of a hearing held in Washington on June 30 to establish the advisability of prohibiting or regulating all interstate movements of the cultivated black currant and flowering currant except as to movements originating in and between the States of Alabama, Arkansas, Florida, Kansas, Louisiana, Mississippi, Missouri, Nebraska, North Dakota, Oklahoma, South Dakota, and Texas. No opposition to this proposal was voiced at the hearing, and there was general approval of the proposal that interstate movement of white-pine stock from all states invaded by this disease should be prohibited in order to prevent its spread in the southern Appalachian and in white-pine plantings in other states now free from the blister rust.

Representatives of the New England Nurserymen's Association brought up the question of desirability of the Federal Government removing the embargo which prevents the shipment of white-pine nursery stock from New England into New York, with the hope that the state authorities in these two regions might come to an agreement through regulatory quarantine. It was pointed out that if proper local precautions were taken, under adequate inspection there is little danger of the spread of the infection in case stock grown in New England were shipped to New York.

FLORIDA ORGANIZES TO SAVE FORESTS OF THE STATE

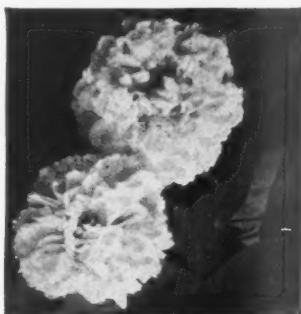
On August 4th a meeting was held at the University of Florida, Gainesville, and the Florida Beautification and Forestry Society, Inc., was organized, with Dr. A. A. Murphree, head of the University, as its president. The new organization already has strong financial backing from public spirited people of the State, and will shortly appoint a permanent executive secretary.

The American Forestry Association will cooperate with the new society in a state-wide campaign for fire protection, adequate forestry laws, and attention to landscape improvements, especially along the highways of the state. An attempt will be made to have a branch organization in each county.

The new organization has gone on record as a vigorous supporter of the Clarke-McNary law and through its efforts, and those of the state forestry association, Florida is expected to soon be listed among the states which are making real progress in the settlement of their forestry difficulties.

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The Most Splendid Flower in Cultivation



THE delicate fragrance, elegant shape and form, and the great variety of shades make them favorites everywhere. Our collection is one of the largest in the world. Our planting is comprised of over a thousand varieties, from which to make your selection. We guarantee all of our Peonies—true to name. We are making you the following SPECIAL TRIAL OFFER at prices far below the actual value of these wonderful Peonies. These are all splendid strong divisions with from three to five eyes. Every Peony is a gem. Try them.

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Edulis Superba, Mauve Pink.....	\$1.75
Souv. de l'Ex. Universelle, Violet Rose..	.75
Rubra Superba, Crimson.....	.75
Meissonier, Cherry Red.....	.75
Madame de Verneville, White.....	.75
	\$1.75

The entire collection for \$3.00 postpaid

MOTHER'S COLLECTION

Here's the flawless, exquisite collection for the artistic taste.

Albert Crousse, Shell Pink.....	\$1.00
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Couronne d'Or, Snow White.....	1.00
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Bartigon, Fiery Clear Red	Bright
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Rose	

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Pride of Haarlem, Brilliant Scarlet Salmon
Reverend Ewbank, Silvery Heliotrope

1 dozen any variety, 75c. 3 dozen any variety, \$2.00.

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FALL PLANTING OF EVERGREENS

EARLY Fall rains make early Autumn a very favorable time for planting all varieties of evergreens and evergreen shrubs.

We now offer several specialties worth your attention:

- (1) **Rhododendron and Laurel** in car lots at less than \$1 each for bushy 2 and 4 foot plants, each with ball.
- (2) **Pines and Spruces** in quantity, various sizes from 18 inches to 4 feet as low as \$40 per 100.
- (3) An extensive list of **Seedings and Transplants** for Forestry as low as \$10 per thousand.

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Koster Blue Spruce

7 to 10 ft. Specimens

Prices Reasonable in Quantity Lots

WM. M. MILLER CO., Paterson, N. J.

The supply of the following issues of the Association's magazine is very low or completely exhausted:

All issues previous to 1921.

April, September, October, November, and December, 1921.

October and November, 1922.

January and December, 1923.

It will be appreciated if members having copies of these issues, for which they have no further use, will send them to the Association so that they will be available to libraries, schools, and individuals who wish to complete certain volumes.



Carolina Hemlock, (*Tsuga caroliniana*)

Also many rare plants from the Arnold Arboretum

Harlan P. Kelsey

CAROLINA HEMLOCK

(*Tsuga caroliniana*)

"As you know, I consider this tree (Carolina Hemlock) the handsomest conifer we can grow in New England."—Prof. C. S. Sargent, Director Arnold Arboretum, Jamaica Plain, Massachusetts, October, 1923.

Introduced to cultivation by Harlan P. Kelsey.

	Each	Ten
Fine specimens, 2-3 ft.....	\$3.50	\$30.00
Fine specimens, 3-4 ft.....	6.00	50.00
Fine specimens, 4-5 ft.....	12.00	100.00

All balled and burlapped

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Hardy American Plants

Salem, Mass.

OKLAHOMA FOREST COMMISSION ORGANIZED

Under the recently passed bill establishing a forest commission for Oklahoma, a meeting was called at Oklahoma City by Mr. J. A. Whitehurst, President of the State Board of Agriculture and *ex officio* Chairman of the forest commission. The meeting was addressed by Gov. Holloway and plans for cooperating with official and civic organizations in the state were considered. The law provides for the employment of a Secretary who must be a trained forester, but no appointment has yet been made. The other members of the commission besides President Whitehurst are, Mr. John Easley, Editor the Daily Ardmoreite, Ardmore; Mrs. I. L. Huff, Mr. J. A. Craig, and Dr. Bradford Knapp, President A. and M. College, Stillwater.

RAILROADS REDUCE FIRES IN PENNSYLVANIA

Recently, the Forester of Forbes District, Pennsylvania, requested brief reports from railroads as to what steps had been taken during recent years to reduce the number and size of forest fires originating from locomotives. Four of the largest railroads responded.

The Pennsylvania Railroad reported daily inspections of locomotives and ash-pans, especially during the spring fire season where fire hazards justified these precautions. The General Manager's office investigates every reported case of firemen seen opening ash-pans while on the road, where sparks or cinders are scattered, or fires set by the locomotives.

The Baltimore & Ohio Railroad reported that ash-pans with top hoppers with slides or doors sufficiently tight to prevent the escape of live cinders and a netting arrangement in front of the smoke box, had been designed. This netting prevents escape of sparks of sufficient size to start fires. Cards bearing the legend "Go back and put out fire" are carried by train and engine crews, who throw them out to track workers, crossing watchmen, station employees and section gangs, who have instructions to obey this order immediately, in case of a fire along the right of way.

The Western Maryland Railroad has a system of inspecting front-end screens and ash-pans. All trackmen have standing instructions to report sparks from stacks or fire-boxes of passing locomotives. As soon as possible after such a report, engines are inspected and conditions corrected. If impossible to correct them, trackmen follow the trains in motor cars to extinguish any fires.

The Ligonier Valley Railroad has equipped its engines with number 393 netting over drafts and extensions at ash-pan openings to prevent cinder fires.



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**ALBANY CHECKS UP ON ITS
MUNICIPAL FOREST**

A tract of 615 acres on the watershed of Rensselaer Lake, near Albany, New York, one of the sources of the city's water supply, was set aside as a municipal forest in April, 1925. The State Conservation Commission furnished 50,000 three-year-old Scotch pine transplants from its Saratoga nursery, and the New York State Forestry Association, acting through its secretary, J. R. Simmons, undertook the planting of them. Fort Orange Council, Boy Scouts of America, the Kiwanis Club, and the Rotary Club co-operated in furnishing planting gangs to do the actual work of setting out the young trees. The trees planted this spring cover about half of the open land on the tract.

Secretary Simmons, of the State Forestry Association, who made a rough survey of the tract to determine the value of the mature growth on the forested portions, stated that more than 2,000 cords of wood for fuel and 3,500 pitch-pine piles 30 feet and upwards in length are available for immediate use and could be taken as thinnings without injury to the forest. With piles worth from 35 cents to 40 cents per running foot, the market value of the piles would be between \$40,000 and \$50,000 and the local price of wood fuel ranges from \$14 to \$18 per cord, prepared for use. There is a large quantity of inferior hardwood which is fire-scarred and crooked and which should be removed for the good of the forest.

The municipal forest is used extensively for recreation and there are a number of fine picnic grounds scattered over it in old pine groves, most of which are remote from the newly planted sections.

**EFFICIENCY OF SPARK ARRESTERS
WILL BE STUDIED IN CALIFORNIA**

At a recent conference of the pine operators, Forest Service and State Forest officers held in San Francisco, it was agreed to find out if possible the definition for "adequate spark arresters" which are required on donkey logging engines. In order that the study may be entirely unbiased, an investigation will be conducted under the auspices of the California Forestry Committee. Railroads, redwood operators, white and sugar pine operators, State Forestry Commission, Forest Service, California Development Association, state press, cattlemen, Division of Forestry of the University of California and the California Forest Protective Association will be represented. Field studies and experiments will be conducted in an attempt to ascertain the effectiveness of various kinds of spark arresters, to develop improvements where possible, and to study the effect of outside exhausts on donkey engines.

**CATNIP TO TEMPT MOUNTAIN
LIONS**

An experiment has been undertaken in British Columbia to see whether or not catnip oil can be used as a lure to trap mountain lions or cougars, as they are called in that portion of the country. The idea originated with the United States Bureau of Biological Survey.

Mr. A. K. Fisher of this Bureau furnishes the following information concerning previous experimentation with catnip:

"Years ago by accident I learned that practically all members of the cat family were fond of catnip. Later on, with hopes of reducing the cost of killing mountain lions and wild cats, the catnip oil was introduced as a lure with very good success. It was found that the odor in the dry leaves, the tincture, or fluid extract was not permanent enough, so that with considerable effort a comparatively small quantity of the oil was secured. In experimenting with this oil at the Zoo, it was found that every member of the cat tribe, with the exception of the cheetah, was immediately attracted by its odor.

"So far as known, none of the drug houses extract catnip oil, and as the plant contains so little it is quite difficult to obtain any considerable quantity. If, however, there was a demand, undoubtedly some drug firm would add it to its list of vegetable oils."

**FOREST PRODUCTS NINE PER CENT
OF ALL FREIGHT TONNAGE
LAST YEAR**

During 1924, according to figures released by the Interstate Commerce Commission, the railroads of the United States carried 108 million tons of forest products. This was approximately nine per cent of all the revenue freight hauled by the class one railroads. The National Lumber Bulletin states that loadings of forest products so far in 1925 have exceeded those for the same period of 1924 by about 5,000 cars.

**WOOD STRUCTURES WITHSTAND
EARTHQUAKE SHOCKS**

A Santa Barbara building and loan association reports that only 150 homes out of 1,000 upon which it had loans were damaged by the recent earthquake. Practically all of the damage reported has to do with chimneys and fireplaces. The only serious damage to frame buildings themselves, is said to have resulted from frail foundations or old and rotted mudsills.

One of the lessons to be learned from the disaster, according to the officers of this company, is that wood is an ideal structural material for buildings which must resist earthquake shocks, especially if the proper amount of nailing and bracing is used.

PUBLIC LANDS COMMITTEE HEARINGS ON GRAZING

The sub-committee of the Public Lands Committee of the Senate, appointed to investigate grazing on the National Forests and other Government lands is now holding hearings in the west. The most important hearing was held at Salt Lake on August 26, to which representatives from all the different Western States and grazing organizations were invited. Representatives of the Agricultural Commission, appointed by President Coolidge, were also asked to be present at this meeting. Other hearings scheduled at the time of going to press are as follows:

Helena, Montana, August 31.
Missoula, Montana, September 1.
Yakima, Washington, September 3.
Seattle, Washington, September 4 and 5.
Portland, Oregon, September 8 and 9.
Pendleton, Oregon, September 10.
Baker, Oregon, September 11.
Boise, Idaho, September 12 and 14.

Hearings are yet to be arranged for, one each in Nevada, California, New Mexico and Colorado.

The members of the sub-committee are:

Ralph Cameron,	Arizona.
Selden P. Spencer,	Missouri.
Tasker L. Oddie,	Nevada.
Porter H. Dale,	Vermont.
Key Pittman,	Nevada.
Andrieus A. Jones,	New Mexico.
John B. Kendrick,	Wyoming.
C. C. Dill,	Washington.

The initial hearings of this sub-committee were held in Washington in April and in June, 11 hearings were held at different points in Arizona. As a result of these hearings it is the purpose of the sub-committee to recommend to the Senate a plan for the management of grazing on the National Forests and the unreserved public Government lands.

SOUTH COMING FORWARD AS SOURCE OF BOOK PAPER

According to Mr. W. H. Sullivan of the Great Southern Lumber Company who spoke on July 31 before the Louisiana State Forestry Association at its meeting held at Natchitoches, there is a great field ahead for the manufacturer of paper from gum wood pulp in the South. He pointed out that one of the largest publishing houses in the United States has moved its printing establishment to Kingsport, Tenn., where a modern mill is producing 35 tons of book paper per day from gum wood. A splendid community of 8,000 people has been built up around this industry since 1918.

Mr. Sullivan predicts that printing establishments will move to the South as the manufacture of fine grade book paper is developed, in the same way that cotton mills of the North are moving into the southern states in order to be close to the supply of raw material.



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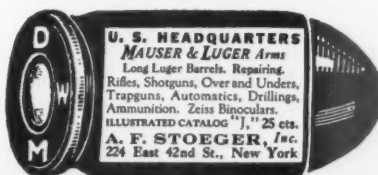
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POSITION WANTED—By an American, as superintendent, assistant superintendent, caretaker, or warden on large country estate, game preserve, forest preserve, or wild-life sanctuary. Thirty years' experience in the woods and on agricultural projects. Have a good working knowledge of reforestation, thinning, clearing, land development, and of the practical end of work connected with the conservation of American wild life and game fish. Very successful in propagating and rearing quails. Location in South preferred, but will go anywhere. Good references. Address Box 23, care of **AMERICAN FORESTS AND FOREST LIFE**, Washington, D. C. (7-8-9)

TEACHING POSITION in Forestry wanted by young man 28 years old. Degrees in forestry from two of largest schools in country. Five years' practical experience with government and private concerns in both east and west. Also research experience and best of references. Address Box 24, care of **AMERICAN FORESTS AND FOREST LIFE**, Washington, D. C.

FOREST INSPECTOR, German, trained in science of forestry, served in five European countries (private and government positions) desires employment; qualified to manage large forest estate, or to take charge of any forest and engineering work; age 36, speaks five languages; best references. Address Box 25, care of **AMERICAN FORESTS AND FOREST LIFE**, Washington, D. C. (9-10-11)

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MICHIGAN WILL ORGANIZE CONSERVATION COUNCIL

Twenty-one representatives of fifteen organizations met at the Gull Lake Hotel, Richland, Michigan, on Wednesday, July 15, and planned the organization of a Conservation Council for the state to be made up of representatives from "each organization or publication which has or may in the future express itself in any way favorable to conservation." It is planned to have an Executive Committee to represent the council during the time between meetings so that the organization may not become unwieldy. John A. Doelle, of Grand Rapids, Secretary-Manager of the Michigan Division of the Izaak Walton League of America, was made chairman of the meeting and instructed to call another conference on or before September 10.

Resolutions were adopted favoring larger Federal appropriations for fire protection under the Clarke-McNary Act, and favoring the passage of the McNary-Woodruff bill for the purchase of Eastern National Forests.

MAN-CAUSED FIRES FEWER IN CALIFORNIA

Last year California had 556 man-caused fires on its National Forests up to July 20th. This year there have been only 176. The total number of fires for the two periods was 830 previous to July 20, in 1924, and 708 for the same period in 1925. Commenting on these figures District Forester Paul G. Redington points out that they indicate the quality of cooperation which Californians are giving in the problem of reducing the number of preventable fires. Efforts to keep the record up to its present standard will be helped by the restrictions against smoking, except in places of habitation, which is in force on the Santa Barbara National Forest, and a similar restriction on a small area of windfall on the California National Forest. Whole-hearted cooperation is expected from sportsmen when hunting seasons open.

EARTHQUAKE FAILS TO DISLodge SANTA BARBARA FOREST LOOKOUT

The lookout building directly back of Santa Barbara on La Cumbre Peak was squarely in the path of the recent earthquake but probably because it was built on a huge rock it withstood the shakes, while the coal oil in the tank of the stove was spilled out and all of the water in the 25-gallon tank was lost. Lookout Benny Moore stayed faithfully on the job and within a few minutes after the heavy shake reported a fire.

UNIQUE NATURAL GRAFT

By C. S. EMERSON

On a recent visit to Cathedral Woods property of Dartmouth College in Hanover, New Hampshire, and within a mile of the college buildings I ran across a

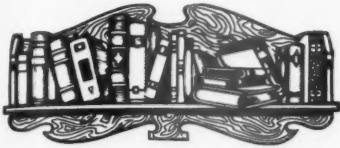


THE DOUBLE NATURAL GRAFT

case of natural grafting unique to me. Whether from the same root originally or separately rooted present conditions do not divulge, but quite likely from the same trunk root just above the ground sprang two trunks which have attained goodly size. Three feet from the ground they formed a union, and three feet higher a second. The smaller trunk is now entirely dead and largely rotted off close to the ground, but the top is healthy and growing from the two unions and the support of the larger trunk. The contour of the ground and surrounding growth provide some protection from the winds, and the freak promises to continue for many years. The tree is the *Pinus strobus*, Northern White Pine.

PENNSYLVANIA REALIZES REVENUE FROM SUMMER CAMPS

More than 225,000 people used the 1,300 permanent camps leased to Pennsylvania citizens on State Forests during 1924. These camp sites are widely scattered and are leased at an annual rental of from \$7.00 to \$15.00. Last year the state realized \$10,000 income from this source according to an interesting brochure, "The State Forests of Pennsylvania," recently issued by the Department of Forests and Waters.



BOOK REVIEWS

NATURE'S SILENT CALL. By Wilborn J. Deason. Bunting Publications, Waukegon, Illinois.

This book, the happy result of an accident which "snowed in" the author while vacationing in his Ontario camp and enforced a protracted stay, offers a splendid antidote to the "tired business man." Written by a medical man of repute as well as a real nature lover, it carries conviction and one feels that it is almost a duty to answer that "silent call" and seek repose for the soul and healing for the body in Nature's quiet spaces. It is not the beauty of descriptive phrase that most impresses one in this book, but the simple telling of extremely interesting experiences had on camping and hunting trips running over a period of years. It is full of meat for the newcomer to the woods, inspiring to those as yet unacquainted with "roughing it," and offers much in retrospective enjoyment to the "old-timer." Well and attractively presented, the volume is illustrated with camera studies actually made by the author or members of his party, which add a delightfully intimate touch.

COMMON TREES OF PENNSYLVANIA. By Joseph S. Illick, 1925. The Times-Tribune Company, Altoona, Pennsylvania.

Professor Illick has again done the thing that needed to be done. He tells in an interesting manner about the familiar trees of Pennsylvania in language that young folks can understand, without in the least appearing to talk down to them. In a few brief, chatty paragraphs he discusses why, how, when and where to study trees; and provides some little known information regarding historic, massive and unique trees growing in "Penn's Woods."

He then gets down to the business of describing some ninety-five trees common to Pennsylvania, and does it very well. The descriptions are boiled down to essentials, but one feels nothing is omitted. Aside from the botanical names, there are very few technical words to dampen the ardor of the young folks who will use this booklet as a field text.

This booklet is bound in buff paper covers, attractively decorated. The line drawings, which accompany the descriptions, are excellent aids to identification of the species.

THE GIANT SEQUOIA. By Rodney Sydes Ellsworth. Published by J. D. Berger, Oakland, California.

A remarkably interesting account of the history and characteristics of the Big Trees of California, written "not by a botanist for botanists, but by a tree-lover for tree-lovers."

A valuable account of the little known Galen Clark, a California pioneer, who discovered the Mariposa Grove of Big Trees is included in the volume, and valuable historical facts concerning the administration of the Mariposa Grove by the State of California previous to the time it was ceded to the Government in 1906, when it became a part of Yosemite National Park.

The author gives considerable space to the story of the name "Sequoia" and suggests that Endlicher, the celebrated Austrian who in the year 1874 established the genus *Sequoia* and who was an eminent linguist as well as a botanist, was acquainted with the colorful career of "Sequoyah" an Indian who invented the Cherokee alphabet. He further calls attention to the fact that Hooker and Englemann believed that the name *Sequoia* was derived from the name of the famous Cherokee.

Tree-lovers throughout the world, whether or not they have seen the Big Trees, will gain inspiration from this book, and those who have known the Sierras after reading it, will close homesick eyes to dream of their beloved hills.

OUR GREATEST MOUNTAIN. By F. W. Schmoë, B. S. F. G. B. Putnam & Sons (New York).

This is a handbook for the Mount Rainier National Park in the State of Washington. Its author is the Park Naturalist at Mount Rainier and has made an extensive study of the old mountain and its environs, spending much time in becoming familiar with the native plants and animal life of the region. Mr. Schmoë has divided his book into four parts as follows: The Mountain, The National Park, Flora and Fauna, and Winter on the Mountain. Each section deals thoroughly with its subject, and every element which would be apt to interest prospective visitors to the Park is covered. Sixty-four illustrations of unusual beauty and clearness and a map of the Park showing its system of glaciers, principal roads and the Wonderland Trail add greatly to the general attractiveness of the volume. A reading of it is an alluring invitation to visit the Park and become acquainted with the ever-varying character of lofty Mount Rainier.

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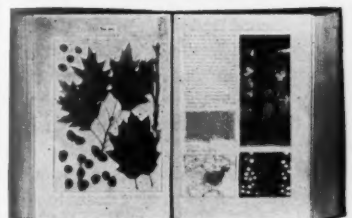
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Shall the Stockmen Control the National Forests

(Continued from Page 522)

tive system. If we wanted to increase our receipts, if that were our primary motive, or to charge all that the traffic would bear, or to commercialize the ranges in an ordinary business way, we could do it simply by putting up the allotments for competitive bids. But we do not propose that, because we do not believe in it * * * * We believe a competitive system would break up the utilization of our ranges by the local ranches that are best entitled to use them. We believe it would introduce confusion and instability in the livestock business, and that it would result in practical confiscation of many large investments in livestock production. Such a system should never be resorted to on National Forest ranges because it would make the livestock business too unstable and insecure."

Back of the charges of the stockmen that the Forest Service is a high-handed bureaucracy; that the use of the National Forests for revenue purposes was never contemplated by Congress when it passed the original Forest Reserve Act; that commercializing the forage in the same way that the timber on the National Forests is commercialized is un-American, and that it means the ruination of the livestock industry, conservationists see a concerted effort to defeat the proposed increase and to block for all time a fair valuation of Uncle Sam's Forest resources. In the past the stockmen using the National Forests have received the difference between the full value of the range and the fees actually paid. In marketing their livestock they have not made any reduction in the price corresponding to the cheap range obtained from the government. Also they have sought to capitalize as their own the value of their privilege of using public property. In selling their livestock and ranches with a waiver of their grazing privileges on the National Forests they have priced their stock several dollars a head above the market to include the capital value of the government privilege, or this capital value has been added to the price asked for the accompanying ranch property.

The lariat of the stockmen seems already to have encircled the Capitol dome, for there was passed in the United States Senate on January 31, last, the Phipps Bill which, among other things, would reduce the grazing fees now in effect on the National Forests approximately sixty-five per cent, and would establish a "Board of Grazing Appeals" consisting of two members of the Department of Agriculture, two members of the livestock industry, and a fifth member to be chosen by the four designated. All decisions of the Board created

by the bill would be final whether in accordance with the views of the Secretary of Agriculture or contrary to them. The bill was reported favorably for passage by the Senate Committee on Public Lands without a single hearing having been held on it, but in the House the bill was referred to the Committee on Agriculture and there it died.

That it will be reintroduced in both houses of Congress this fall, possibly in amended form, seems to be in line with the program of the stockmen. There was also passed in the last Senate, Resolution Number 347, authorizing the Committee on Public Lands, or any subcommittee thereof "to investigate all matters relating to National Forests and to the public domain, and their administration," and directing the committee to make a final report to the Senate "as to its findings at the beginning of the first regular session of the Sixty-ninth Congress, together with recommendations for such legislation as it deems necessary." The members of this subcommittee are Senators Robert N. Stanfield, of Oregon, Chairman; Ralph Cameron, Arizona; Selden P. Spencer, Missouri; Tasker L. Oddie, Nevada; Porter H. Dale, Vermont; Key Pittman, Nevada; Andrieus A. Jones, New Mexico; John B. Kendrick, Wyoming, and C. C. Dill, Washington.

In the hearings which this committee has thus far held, Senator Stanfield and Senator Cameron have been the Inquisitor Generals of the Forest Service and its handling of grazing. The committee has held hearings in Washington and in Arizona. Others are scheduled for this month and September in Utah and other western states. A review of the hearings thus far held and of press releases from the stockmen is illuminating in reflecting the antagonism of Senators Stanfield and Cameron to the present grazing policy of the Forest Service. In one of its weekly bulletins, the Idaho Wool Growers' Association told its members:

"Mr. Stanfield is thoroughly imbued with the idea that we are absolutely ridden to death by the bureaucracy of the Forest Service. We have no legal appeal from Forest Service rules. He is going after the Forest Service and will get it down to a legal status so that a man's rights are legal rights and he can appeal to a legally constituted court and get trial by judge."

At the committee hearings in Washington, when Edward C. Finney, Assistant Secretary of the Department was being questioned, Senator Cameron asked: "Don't you think, Judge Finney, that with the facilities, for instance, which you have

in the Interior Department, governing the public domain and all other branches, excepting the Forestry Service, that the Forestry Service could be administered with a great deal less expense to the Government if it was in your department?"

ASSISTANT SECRETARY FINNEY. I believe it could be administered more economically; yes, sir. It should be.

SENATOR CAMERON. And that would be a saving in the fees of the stockmen, would it not?

ASSISTANT SECRETARY FINNEY. If they were based on expense of administration.

SENATOR CAMERON. I mean if the fees were based on such a law as we are talking about?

ASSISTANT SECRETARY FINNEY. Yes. I have frankly stated to officers of the Forest Service that I believe their bureau should be in the Interior Department. I still believe that.

SENATOR CAMERON. Well, the expense of grazing fees at the present time is one of the big complaints that we have.

ASSISTANT SECRETARY FINNEY. I am not familiar with the fees that they charge in the forest reserves, Senator.

SENATOR CAMERON. Stockmen all think they are too high. And what we want to get at is to see if we can not benefit the stockmen by having these fees reduced instead of raised.

ASSISTANT SECRETARY FINNEY. Well, of course, I can not express any opinion on that because I am not familiar with the fees.

SENATOR CAMERON: I understand that, but that is what we are trying to get this information for, so as to govern ourselves when we get through by the information we receive during the hearings.

The Committee has not escaped criticism, particularly for the manner in which its hearings were conducted in Arizona late in June. The hearings were held in the name of the committee, and were conducted by Senators Cameron and Ashurst, both of Arizona, who were the only members of the committee present. Senator Ashurst was not originally on the committee but according to the secretary of the committee, was appointed prior to the Arizona hearings. The re-election of Senator Cameron comes before the people of the state next year. The hearings pretty well blanketed the state, being held at Douglas, Tucson, Globe, Prescott, Flagstaff, Phoenix, Florence, Grand Canyon, Holbrook, St. Johns and Springerville. The number of hearings held in Arizona—more than five times the number planned for any other western state except Oregon

(Concluded on Page 575)

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Shall the Stockmen Control the National Forests

(Concluded from Page 574)


where three are scheduled—has given rise to the criticism that Senators Cameron and Ashurst used the committee to tour their state and repair their political fences.

At these hearings, Senator Cameron openly attacked the Forest Service and the Chief Forester, and in this he was ably supported by Senator Ashurst.

A prediction of what this committee will recommend to Congress when the Sixty-ninth session convenes in December next has already been made by the Idaho Wool Growers' Association. In a special weekly bulletin issued as long ago as April last, it said:

"One object of the committee will be to make a thorough study of grazing regulations by the Forest Service. It is not unlikely that when the committee reports it will recommend that Congress by law, prescribe the terms on which grazing both in and outside the National Forests shall be regulated. In other words, the committee probably will recommend that Congress, instead of the Secretary of Agriculture and the Forest Service, shall hereafter regulate grazing fees and fix the conditions upon which the range shall be leased."

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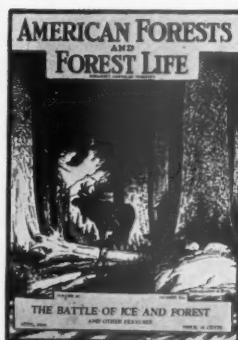
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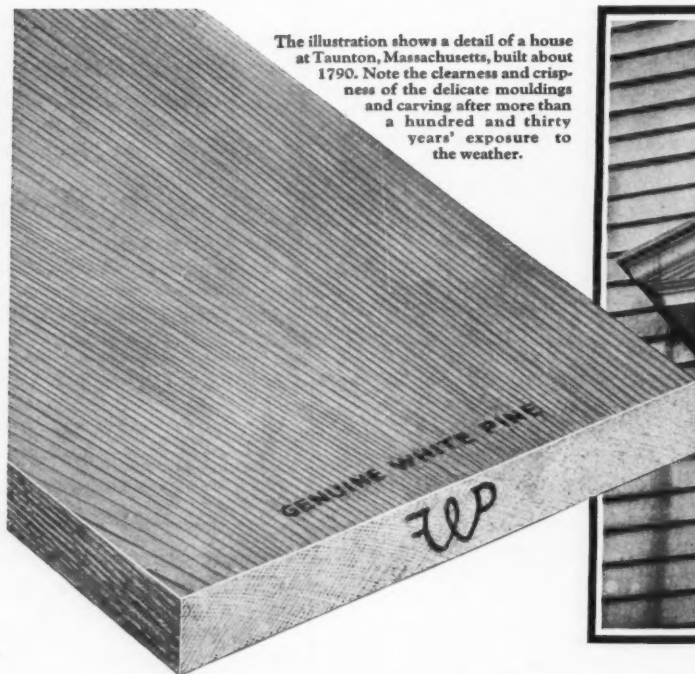
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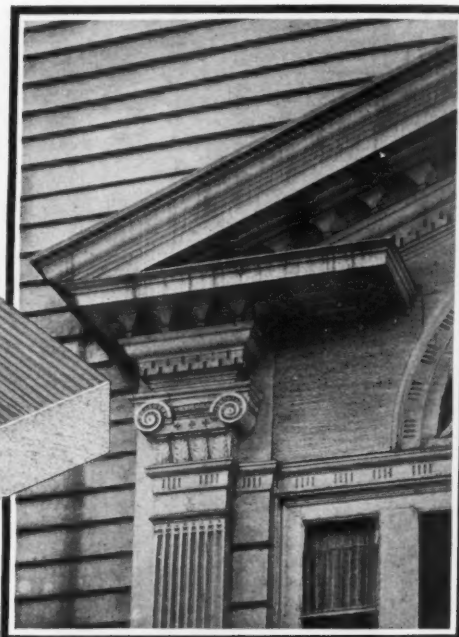
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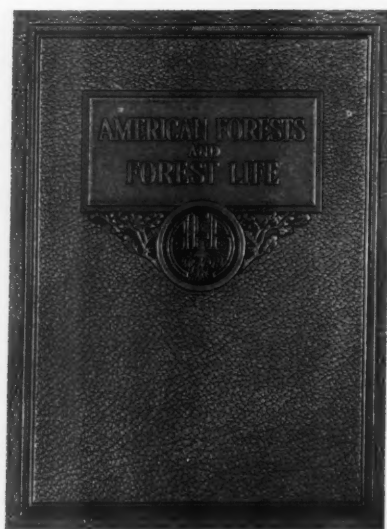
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